

THE (DUBLIN) JOURNAL

OF
MEDICAL SCIENCE:

[Late DUBLIN QUARTERLY JOURNAL OF MEDICAL SCIENCE.]

CONTAINING
ORIGINAL COMMUNICATIONS,

REVIEWS, ABSTRACTS, AND REPORTS,

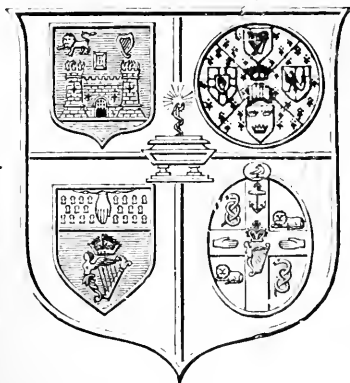
IN

Medicine, Surgery, and Collateral Sciences.

Edited by Sir JOHN MOORE, B.A., M.D., Univ. Dublin; F.R.C.P.I.

THIRD SERIES.

No. 376.



APRIL,

1903.

402408
17.4.42

DUBLIN: FANNIN & CO., LTD., GRAFTON-STREET,

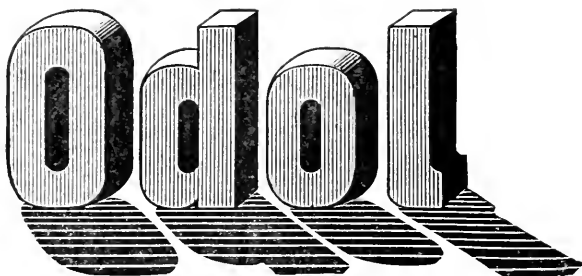
To whom Communications for the Editor and Books for Review are to be addressed.

LONDON: SIMPKIN, MARSHALL & CO.

EDINBURGH: JAMES THIN

AGENT IN AMERICA—GUSTAV E. STECHERT, 9 EAST SIXTEENTH-ST., N.Y.

ANNUAL SUBSCRIPTION, £1.—SINGLE NUMBER, 2s.



The Modern Hygiene of the Mouth.

It is well known that modern hygiene sets but little value on tooth-powders or tooth-pastes as teeth cleansers—these preparations being serviceable only in scouring the outward and visible surface of the teeth in a mechanical way, whereas the cavities and fissures, the very seat of decay in the teeth, are more often filled up than cleansed by the process, the cause in itself of the injurious effects that so frequently ensue from the use of the tooth-powders and pastes known to the trade. In the case of tooth-soaps and pastes especially, the presence of alkalis, to be detected even in the best soaps, is particularly prejudicial to the teeth.

To arrive, then, at a rational method of preserving the teeth, as the epoch-making experiments of Miller have already demonstrated, can only be done by the use of some antiseptic lotion; the decomposing and fermenting processes perpetually going on in the mouth cavity, and which is the cause of destruction in teeth, can only be neutralised by such means.

Hippe has laid down the following three essential qualities for a mouth lotion for daily use:—

- (a) Absolute innocuousness and freedom from venomous organisms for the teeth as well as for the mucous membrane;
- (b) Sufficient bactericidal strength;
- (c) Agreeable taste and odour.

Preparations which irritate the mucous membrane, such as Calcium Permanganate, Formaldehyde, whether soaps or other compounds, are here as little desirable as acid mouth lotions, which calcine the teeth.

A variety of the most-used mouth-washes have now been tried with the view of fulfilling the above conditions, when it has been proved that of all the well-known mouth-washes **ODOL alone embraces all these three qualifications.**

That which more especially characterises ODOL is, that taken by itself, its action is only mildly antiseptic, but that it works as a most powerful antiseptic when in contact with the mucous membrane and the living cells. ODOL alone has this peculiar action, in accordance with a principle (one, be it said, hitherto not yet used in connection with mouth lotions), and it is this rare property that makes ODOL, from a hygienic point of view, so valuable; for, in rinsing the mouth, microscopically small drops of ODOL remain hanging to the mucous membrane, covering the whole oral cavity with antisepticum, which, coming in contact with the mucous membrane, slowly splitting up and producing the antiseptically-acting particles, whose effects continue for hours afterwards, and not merely during the brief period occupied by the rinsing of the mouth.

This slow and continuous action, and its perfectly innocuous effect, distinguish ODOL from all hitherto familiar antiseptics, and the most eminent analytical discoveries of our time have pronounced ODOL to be **the most efficacious preparation for the daily care of the mouth and teeth.**

Free Samples and Literature will be sent on application to the

ODOL CHEMICAL WORKS, 26 Southwark Bridge Road, London, S.E.

"THE LANCET" on

VAN HOUTEN'S COCOA.

" In a recent analysis
" which we have made, the results
" distinctly indicate the advantage of
" VAN HOUTEN'S PROCESS of manu-
" facture. Thus this Cocoa yields
" a decoction containing a maximum
" proportion of the valuable food
" constituents of the bean, and what
" is of more importance still, these
" are presented in a condition more
" easy of assimilation and digestion
" than in Cocoa not so prepared."

J. & A. CHURCHILL'S NEW BOOKS.

ELEMENTS OF PATHOLOGICAL ANATOMY AND HISTOLOGY.

By W. S. LAZARUS BARLOW, M.D. F.R.C.P., Lecturer on Pathology at the Westminster Hospital; Author of "A Manual of General Pathology." With 7 Coloured Plates and 171 Figures in the Text. 24s. net.

A. SYSTEM OF CLINICAL MEDICINE FOR PRACTITIONERS AND STUDENTS, giving an Account of the Diagnosis, Prognosis, and Treatment of Disease. By THOMAS D. SAVILL, M.D. Lond., D.P.H. Cantab., M.R.C.P. Lond.

Vol. I. LOCAL DISEASES AND PYREXIAL DISORDERS. With 2 Coloured Plates and 110 Illustrations in the Text. 12s. 6d. net.

Vol. II., completing the work, shortly.

A. MANUAL OF DENTAL METALLURGY. By ERNEST A. SMITH, F.I.C., Assay Office, Sheffield. Second Edition. With 38 Illustrations. 6s. 6d.

THE BLOOD: How to Examine and Diagnose its Diseases. By ALFRED C. COLES, M.D., B.Sc. Second Edition. With 6 Coloured Plates. 10s. 6d.

OBSTINATE HICCUGH, the Physiology, Pathology, and Treatment, based on over 150 recorded Cases, British and Foreign. By L. F. B. KNUTHSEN, M.D. Edin. 6s.

The Medical Directory for 1903.

With Enlarged Page and other Improvements, 14s.

LONDON: 7 GREAT MARLBOROUGH STREET.

By E. HURRY FENWICK, F.R.C.S.,

Surgeon to the London Hospital, and to St. Peter's Hospital for Urinary Diseases.

OPERATIVE AND INOPERATIVE TUMOURS OF THE URINARY BLADDER: a Clinical and Operative Study based on Five Hundred Cases. With 39 Illustrations. 5s.

ULCERATION OF THE BLADDER: SIMPLE, TUBERCULOUS, AND MALIGNANT. With Illustrations. 5s.

TUMOURS OF THE BLADDER. Fasc. I. 5s. net.

THE CARDINAL SYMPTOMS OF URINARY DISEASE. 8s. 6d.

ATLAS OF ELECTRIC CYSTOSCOPY. With 34 Coloured Plates, embracing 83 Figures. 21s. net.

THE ENLARGED PROSTATE. WHAT IS THE BEST FORM OF OPERATIVE TREATMENT FOR ITS CURE? A Clinical Lecture reprinted from *The Practitioner*. 1s.

London: J. & A. CHURCHILL, 7 Great Marlborough Street.]

———, BIRMINGHAM, March 19th, 1902.

“SCOTT’S EMULSION has given most satisfactory results in a case of pulmonary disease, the patient gaining flesh and strength under its administration. It is most palatable, of excellent manufacture. I consider it the best in the market, and cannot speak too highly of it.”

———, M.R.C.S., L.R.C.P.

DR.’s Letter
Season 1901-2
No. 1981

———, NEAR BIRMINGHAM, Dec. 19th, 1901.

“I have for a long time been in the habit, in rather a wide country practice, of recommending SCOTT’S EMULSION in many instances of apparently threatening tuberculous affections of the lungs or other organs.”

———, L.R.C.P.I., M.R.C.S., Mem. B.M. Assoc.

DR.’s Letter
Season 1901-2
No. 831

16-oz. Bottle, with formula, free to any physician, surgeon, or nurse desiring to test SCOTT’S EMULSION. SCOTT & BOWNE, LTD., 95 to 98 Great Saffron Hill, London, E.C.

1. A Treatise on Diseases of the Anus, Rectum, and Pelvic Colon. By James P. Tuttle, A.M., M.D. New York and London: D. Appleton & Co. 1903. 8vo. Pp. 961.
2. The New Sydenham Society. Vol. CLXXVII. Atlas of Clinical Medicine, Surgery and Pathology. London: H. K. Lewis. 1902.
3. The Mental Status of Czolgosz, the assassin of President McKinley. By Walter Channing, M.D. Brookline, Massachusetts. Reprint. 1902. Pp. 46.
4. Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Prof. Dr. Carl von Noorden. Authorised American Edition. Part I. Obesity. Pp. 59. Part II. Nephritis. Pp. 112. New York: E. B. Treat & Co. 1903. 8vo.
5. Burdett's Official Nursing Directory, 1903. By Sir Henry Burdett, K.C.B. Fifth Year. London: The Scientific Press. 8vo. Pp. 492.
6. A Manual of Family Medicine and Hygiene for India. By Sir William Moore, K.C.I.E. Seventh Edition. Revised by Major J. H. Tall Walsh, I.M.S., F.L.S. London: J. & A. Churchill. 1903. 8vo. Pp. 680.
7. Clinical Obstetrics. By Robert Jardine, M.D. Edin., M.R.C.S. Eng. London: Rebman. 1903. 8vo. Pp. xxviii + 657.
8. A System of Physiologic Therapeutics. Vol. IX. Edited by Solomon Solis Cohen, A.M., M.D. London: Rebman. 1902. 8vo. Pp. 570. Also Vol. V. 1903. 8vo. Pp. 539.
9. General Paresis. By Robert Howland Chase, A.M., M.D. London: Rebman. 1902. 8vo. Pp. 291.
10. The Development of the Human Body. By J. Playfair McMurich, A.M., Ph.D. London: Rebman. 1903. 8vo. Pp. 527.
11. The Tegmin Dressing and Aseptic Vaccination. By Dr. Gustav Paul. Reprint. 1902. Pp. 7. London: Rebman.
12. "First Aid" to the Injured and Sick. By F. J. Warwick, B.A., M.B. Cantab., M.R.C.S., L.S.A.; and A. C. Tunstall, M.D., F.R.C.S. Ed. Third Edition. Bristol: John Wright & Co. 1903. Pp. 236.
13. The Medical Annual, 1903. Twenty-first Year. Bristol: John Wright & Co. 1903. 8vo. Pp. 959.
14. Practical Handbook of the Pathology of the Skin. By J. M. H. Macleod, M.A., M.D., M.R.C.P. London: H. K. Lewis. 1903. Demy 8vo. Pp. xxiv + 408 and 40 plates.
15. Transactions of the American Ophthalmological Society. New London, Conn. 1902. Vol IX., Part 3. Hartford. 1902. 8vo. Pp. 685.
16. Catalogue complet des Thèses de Doctorat de la Faculté de Médecine de Bordeaux, et de la Liste complète des Thèses de Pharmacie. Bordeaux: L. Robin. 1903. Pp. 48.
17. Les Obsessions et la Psychasthénie. Par le Dr. F. Raymond et le Dr. Pierre Janet. Paris: Félix Alcan. 1903. 8vo. Pp. 544.
18. The Irish Technical Journal. Vol. I., No. 1. March, 1903. Dublin: Browne & Nolan.
19. The Transactions of the Society of Anaesthetists. Volume V. London: John Bale Sons, & Danielsson. 1903. 8vo. Pp. xxxii + 203.
20. Physical Chemistry. By Dr. Ernst Cohen. Authorised Translation by Martin H. Fischer, M.D. New York: Henry Holt & Co. 1903. Pp. 343.
21. Disinfectants and Antiseptics: How to use them. By Edward T. Wilson, M.B. Oxon., F.R.C.P. Lond. London: H. K. Lewis. Fortieth Thousand. (Duplicate copies.) Card. Pp. 4.
22. Atlas and Epitome of Human Histology and Microscopic Anatomy. By Doctor Johannes Sobotta. Edited by G. Carl Huber, M.D. Philadelphia and London: W. B. Saunders & Co. 1903. 8vo. Pp. 248.
23. Atlas and Epitome of Diseases of the Mouth, Pharynx, and Nose. By Dr. L. Grünwald. Second Edition. Edited by James E. Newcomb, M.D. Philadelphia and London: W. B. Saunders & Co. 1903. 8vo. Pp. 219.
24. Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition. By Dr. Prof. Carl von Noorden. Part III. New York: E. B. Treat & Co. 1903. 8vo. Pp. 64.
25. Manuel de la Prostatectomie périnéale pour Hypertrophie. Par le Dr. Robert Proust. Paris: G. Naud. 1903. 8vo. Pp. 186.

26. Catechism Series. Pathology, Part I. Physiology, Parts I. and II. Second Edition. Edinburgh: E. & S. Livingstone.

27. A Short Manual of Inorganic Chemistry. By A. Dupré, Ph.D., F.R.S., F.I.C., F.C.S.; and H. Wilson Hake, Ph.D., F.I.C., F.C.S. Third Edition. London: Charles Griffin & Co. 1903. 8vo. Pp. xvi.+391.

28. The Scottish Medical and Surgical Journal. Vol. XI. (July to December). Edinburgh. 1902. 8vo. Pp. 582.

29. Liverpool School of Tropical Medicine Memoir IX. Report on Malaria at Ismailia and Suez. By Ronald Ross F.R.C.S., D.P.H., F.R.S., C.B. Liverpool: University Press. 1903. Pp. 24.

PERIODICALS RECEIVED—APRIL, 1903.

1. Le Mois Médico-Chirurgical. Cinquième Année. Nos. 1 et 2. Janvier et Février, 1903. Paris: J. B. Baillière et Fils.

2. Journal of Eye, Ear and Throat Diseases. November-December, 1902. Vol. VII. No. 6. January-February, 1903. Vol. VIII. No. 1. Baltimore.

3. Pacific Medical Journal. Vol. XLV. No. 12. December, 1902. Vol. XLVI. Nos. 1, 2. January, February, 1903. San Francisco.

4. Treatment. Vol. VI. Nos. 10, 11, 12. London: Rebman.

5. The St. Louis Medical and Surgical Journal. January, February, March, 1903. St. Louis, Mo.

6. University of Penna. Medical Bulletin. January, February, 1903. Vol. XV. Nos. 11, 12. Philadelphia, U.S.A.

7. Comptes rendus de la Société d'Obstétrique, de Gynécologie, et de Pédiatrie de Paris. Tome IV. Neuvième et dixième fascicules. Novembre et Décembre, 1902. Paris: G. Steinheil.

8. The Laryngoscope. Vol. XII. No. 12. December, 1902. Vol. XIII. Nos. 1, 2. January and February, 1903. St. Louis, Mo., U.S.A.

9. The Monthly Cyclopædia of Practical Medicine. Philadelphia. December, 1902. The F. A. Davis Co. New Series. Vol. V. No. 12. Vol. VI. No. 1. January, 1903.

10. International Medical Magazine. Vol. XI. No. 12. December, 1902. Vol. XII. Nos. 1, 2. January, February, 1903. New York: E. B. Treat & Co.

11. The Phonographic Record. Vol. IX. No. 1. January, 1903. London: Sir I. Pitman & Sons.

12. The Medical Temperance Review. Vol. VI. Nos. 1, 2, 3. January, February, March, 1903. London.

13. The Quarterly Medical Journal. Vol. XI. Part II. February, 1903. Sheffield: Pawson & Brailsford.

14. The Medical Brief. January, February, March, 1903. St. Louis, Mo.

15. Revue Générale de Pathologie interne. Cinquième Année. Numéros 23, 24. Paris. 1903.

16. The Printer's Engineer. January, February, 1903. London: Walker Brothers.

17. The American Practitioner and News. Nos. 116, 117, 118, 119. Vol. XXXIII. Louisville, Ky. 1902.

18. The Journal of Balneology and Climatology. Vol. 7. Part 1. London: John Bale, Sons & Danielsson. January, 1903.

19. Blätter für klinische Hydrotherapie. Wien. XII. Jahrgang. Nr. 12. December, 1902. XIII. Jahrgang. Nr. 1. Jänner, 1903.

20. Gaillard's Medical Journal. Vol. LXXVII. No. 6. December, 1902. Vol. LXXVIII. No. 1. January, 1903. New York.

21. The Caledonian Medical Journal. Vol. V. No. 5. January, 1903. Glasgow: Alex. MacDougall.

22. Le Mois Thérapeutique. Troisième Année. No. 11. Décembre, 1902. Quatrième Année. No. 1. Janvier, 1903. Paris.

23. The Medical Times and Hospital Gazette. Vol. XXXI. No. 1304. London, February 28, 1903.

24. The New Zealand Medical Journal. Vol. II. No. 8. October, 1902. Wellington, N. Z.

25. Annales de la Polyclinique de Bordeaux. 15^e Année. No. 1. Janvier. No. 3. Mars, 1903. Bordeaux: Ferey et Fils.

26. L'Écho médical du Nord. Septième Année. Nos. 8, 9, 10, 11, 12. Lille.

27. American Gynecology. Vol. 1. No. 6. December, 1902. New York.

THE TEST OF TIME AND EXPERIENCE.**THIRTY YEARS OF CONFIDENCE**

On the part of the Profession have established, beyond all question, that

SYR. HYPOPHOS. CO. FELLOWS

— IS THE —

REMEDY—PAR EXCELLENCE—

In Anæmia, Neurasthenia, Bronchitis, and Influenza, and during Convalescence from exhausting diseases.

It contains—Hypophosphites of Iron, Quinine, Strychnine, Lime, Manganese, and Potash. Each fluid drachm contains the equivalent of 1-64th grain of pure Strychnine.

SPECIAL NOTE.—Fellows' Syrup of Hypophosphites is **NEVER SOLD IN BULK**, and is advertised only to the Medical Profession. Physicians are cautioned against worthless substitutes.

Medical Letters may be addressed to—

Mr. FELLOWS, 26 Christopher Street, New York, U.S.A.

LITERATURE OF VALUE WILL BE SENT ON APPLICATION.

THE NATURAL MINERAL WATERS OF

VICHY

(STATE) (SPRINGS)

CÉLESTINS. For Diseases of the Kidneys. Gravel. Gout. Rheumatism, Diabetes, &c.

GRANDE-GRILLE. For Diseases of the Liver and Biliary Organs, &c.

HÔPITAL. For Stomach Complaints.

VICHY-ÉTAT PASTILLES } **VICHY-ÉTAT COMPRIMÉS**
2 or 3 Pastilles after each meal facilitate } For instantaneously producing an effervescing
digestion. } alkaline water.

CAUTION.—Each bottle from the STATE SPRINGS bears a neck label, with the word "**VICHY-ÉTAT**" and the name of the **Sole Agents:—**

INGRAM & ROYLE, Ltd.,

26 UPPER THAMES STREET, LONDON, E.C.

And at LIVERPOOL and BRISTOL.

Samples and Pamphlets free to Members of the Medical Profession on Application.

Royal College of Surgeons of Edinburgh.

INCORPORATED 1505.

COPIES of REGULATIONS for the FELLOWSHIP, LICENCE, and LICENCE in DENTAL SURGERY, containing Dates of Examinations, may be had on application to the Clerk of the College—JAMES ROBERTSON, Solicitor, 54 George-square, Edinburgh.

Royal Colleges of Physicians and Surgeons of Edinburgh

. . . AND . . .

Faculty of Physicians and Surgeons of Glasgow.

Copies of Regulations for the Triple Qualification of this Board (L.R.C.P.E., L.R.C.S.E., and L.F.P. and S.G.), containing Dates of Professional Examinations for year 1903, Curriculum, &c., and for Diploma in Public Health, may be had on application to

JAMES ROBERTSON, Solicitor, 54 George Square, Edinburgh.

Inspector and Treasurer for Edinburgh,

OR FROM

ALEXANDER DUNCAN, LL.D.,

Faculty Hall, 242 St. Vincent Street, Glasgow.

In applying for copies, please state the date of commencement of Medical Study.

Homburg (Baths),

IN THE TAUNUS.

At twenty-five minutes' distance from FRANKFORT-ON-THE-MAIN.

EIGHT MINERAL WATER SPRINGS.

Most efficacious Treatment against Catarrh, Debility, Weakness of the DIGESTIVE ORGANS, Chronic Constipation, Diseases peculiar to Women, Liver Complaints, Hemorrhoids, Uric Acid Diathesis, GOUT AND RHEUMATISM, Diabetes, Scrofula, and Heart Diseases. Two Ferruginous Springs against Anemia and the after-effects of Influenza. FIRST CLASS AIR CURE. Two splendidly-installed Bathing Establishments in direct connection with the NATURAL GASEOUS FERRUGINO-SALINE WATER. Soolsprudel Baths. Saline Baths. Pine Needle Baths. Mud Baths. Electric Light Baths. Turkish Baths. Inhalation Hall. Winter Cures.

All the rooms of the Kurhaus are open during Winter time. SANITARY ARRANGEMENTS of the highest order. Drinking Water from the Mountains.

Sale and Delivery of the Mineral Waters all the year round.

For Prospectus and Illustrated Pamphlets apply to the

KURVERWALTUNG.

H. C. BARTLETT, F.C.S., Ph.D., says:—

“Your Food is certainly the best I ever examined.”

SCOTT'S

M. O. F.

FOOD

“Unequalled”



... FOR ...

INFANTS, INVALIDS, CHILDREN AND THE AGED.

Important Medical Testimony.

DEAR SIRS,

I think it only right to tell you that I gave the sample tin of Scott's M.O.F. Food to a patient of mine who was suffering from Anæmia and severe Dyspepsia. I had tried every Food I knew of, Meat Juices, and others of every description, but the patient disliked all, and had pain after them. To my surprise, she not only liked your Food, but suffered practically no pain after it. Naturally, I am delighted with the result, and shall recommend your Food in all the numerous cases where such an article of diet is so desirable. I should only be too pleased to get your valuable Food better known.

(Signed) T. C—— G——, M.B., B.C. (Camb. Univ. and St. Geo.).

Makes a delicious dish for Breakfast, Lunch, or Supper.

A FREE SAMPLE may be had by sending Post Card to

A. & R. SCOTT, Limited,
KEIR MILLS,
—DUNBLANE, N.B.

THE DUBLIN JOURNAL

OF

MEDICAL SCIENCE.

CONTENTS.

THIRD SERIES, No. 376.—APRIL 1, 1903.

PART I.—ORIGINAL COMMUNICATIONS.

	PAGE
ART. X.—The Nomenclature of Disease and Causes of Death. By NINIAN M. FALKNER, M.D., F.R.C.P.I.; Dip. State Med.; Medical Superintendent of Statistics, Registrar-General's Office, Ireland, - - - - -	241
ART. XI.—The Utilisation of our Climate in the treatment of Tuberculosis in the Home. By J. R. GARRATT, M.D., B.Ch., B.A.O., B.A., Univ. Dublin. - - - - -	251
ART. XII.—Dysentery amongst the Troops in South Africa, with its Treatment. By J. H. DOUGLASS, M.D., M.B., B.Ch., B.A.O., Dublin University, and L.M. Rotunda, Dublin; late Civil Surgeon to the Forces in South Africa, - - - - -	255
ART. XIII.—Diphtheria. By ROBERT G. H. TATE, M.D., Univ. Dublin, - - - - -	261
ART. XIV.—Case of Primary Cancer of Liver in Girl, aged twenty-one. By W. J. THOMPSON, M.D., Dubl., F.R.C.P.I.; Physician to Jervis-street Hospital, - - - - -	272
ART. XV.—A Case of Splenic Anæmia. By GEORGE PEACOCKE, M.D., F.R.C.P.I.; Assistant Physician, Adelaide Hospital, Dublin - - - - -	274
ART. XVI.—A Case of unusually Severe Measles in an Adult: Second Attack. By DR. J. J. BURGESS, - - - - -	281

PART II.—REVIEWS AND BIBLIOGRAPHICAL NOTICES.

1. Elements of Pharmacy, Materia Medica, and Therapeutics. By WILLIAM WHITLA, M.A., M.D., Professor of Materia Medica and Therapeutics in Queen's College, Belfast; Senior Physician to, and Lecturer on Clinical Medicine, Royal Victoria Hospital; Consulting Physician to the Ulster Hospital for Women and Children; Consulting Physician to the Belfast Ophthalmic Hospital; Examiner in Materia Medica, Royal University, Ireland, &c., - - - - -	286
---	-----

2. The Mycology of the Mouth: a Text-book of Oral Bacteria. By K. W. GOADBY, D.P.H. Camb.; M.R.C.S., L.D.S. Eng., &c.	287
3. Practical Points in Gynæcology. By H. M. MACNAUGHTON JONES, M.D., M.Ch., Master of Obstetrics (<i>Hon. Caus.</i>), Royal Univ., Ireland, F.R.C.S., &c., - - - - -	288
4. A Text-Book of Obstetrics for Practitioners and Students. By J. C. CAMERON, M.D.; E. P. DAVIS, M.D.; R. L. DICKINSON, M.D.; H. J. GARRIGUES, M.D.; BARTON COOKE HIRST, M.D.; CHARLES JEWETT, M.D.; H. A. KELLY, M.D.; R. C. NORRIS, M.D.; C. D. PALMER, M.D.; G. A. PIERSOL, M.D.; E. REYNOLDS, M.D.; H. SCHWARZ, M.D.; J. C. WEBSTER, M.D., - - - - -	288
5. Golden Rules of Refraction. By ERNEST MADDOX, M.D. - - - - -	289
6. Aids to Gynæcology. By ALFRED S. GUBB, M.D. (Paris), M.R.C.S.; late Resident Obstetrical Physician, Westminster Hospital; Fellow of the Royal Medical and Chirurgical Society, &c., - - - - -	290
7. The Irish Technical Journal. A Record of Agricultural and Technical Education in Ireland. Edited by R. MACDONALD, M.A., B.Sc. - - - - -	290
8. A Manual of Practical Medical Electricity, the Röntgen Rays, and Finsen Light. By DAWSON TURNER, M.D., F.R.C.P., Ed.; Lecturer on Experimental Physics, Surgeons' Hall, Edinburgh; Medical Officer in Charge of the Electrical Department, Royal Infirmary, Edinburgh, - - - - -	291
9. Transactions of the British Congress on Tuberculosis for the prevention of Consumption, - - - - -	292

PART III.—SPECIAL REPORTS.

SURGERY. By WILLIAM TAYLOR, B.A., M.B., Univ. Dubl.; Fellow and Member of Council, R.C.S.I.; Surgeon to the Meath Hospital and County Dublin Infirmary, - - - - -	293
---	-----

PART IV.—MEDICAL MISCELLANY.

ROYAL ACADEMY OF MEDICINE IN IRELAND:—

SECTION OF STATE MEDICINE.

President's Address, - - - - -	303
Soup Impregnated with Copper, - - - - -	304

SECTION OF PATHOLOGY.

Cancer of Ovary. By DR. JELLETT and PROFESSOR O'SULLIVAN, - - - - -	304
Abnormal Deposit in Joints. By PROFESSOR E. H. BENNETT, - - - - -	306
Sarcoma of the Duodenum. By DR. PARSONS and PROFESSOR O'SULLIVAN, - - - - -	306
Fracture of the Astragalus. By PROFESSOR E. H. BENNETT, - - - - -	306
Primary Cancer of Liver in a Girl, aged twenty-one. By DR. W. J. THOMPSON, - - - - -	306

CORK MEDICAL AND SURGICAL SOCIETY:—

Alcoholic Cirrhosis of the Liver.	By THE PRESIDENT.	-	-	308
Recurrent Carcinoma of the Breast.	By DR. ATKINS.	-	-	308
The Diseases of Infancy.	By DR. PHILIP G. LEE	-	-	309

SANITARY AND METEOROLOGICAL NOTES. Compiled by SIR JOHN

MOORE, B.A., M.D. Univ. Dubl.; F.R.C.P.I.; F.R. Met. Soc.;
Diplomate in State Medicine and ex-Sch. of Trin. Coll. Dubl.:—

Vital Statistics for Four Weeks ending Saturday, February 28, 1903.	310
Meteorology—Abstract of Observations made at Dublin for the Month of February, 1903.	314

PERISCOPE:—

Congenital Variola.	-	-	-	-	-	285
The Sanitary Institute.	-	-	-	-	-	307
Cerebral Syphilis.	-	-	-	-	-	309
The Blood in Late Syphilis.	-	-	-	-	-	319
Bed-ores.	-	-	-	-	-	319
Cortical Hemianopsia and Sector Defects of the Visual Field.	-	-	-	-	-	319
Open-Air Treatment for the Poor	-	-	-	-	-	320

Medical Department of the Navy.

ADMIRALTY.

NORTHUMBERLAND-AVENUE, W.C.,

10th February, 1903.

AN EXAMINATION OF CANDIDATES

FOR ENTRY INTO THE

Medical Department of the Royal Navy

WILL BE HELD

On the 11th MAY next, and following days,

AT

EXAMINATION HALL, THAMES EMBANKMENT.

The Forms to be filled up by Candidates will be supplied on application to this Department.

H. F. NOBURY, *Director-General*

FANNIN & CO.'S CLINICAL THERMOMETERS.

	£	s.	d.
Hospital Clinical Thermometers. Plain or Lens Front -	0	1	0
A.—Fannin & Co.'s Clinical Thermometers, any length, with indestructible Index, $2\frac{1}{2}$, 3, $3\frac{1}{2}$, and 4 inches, in Metal Cases - - - - -	0	1	6
D.—Fannin & Co.'s Clinical Thermometer, with flat back -	0	2	6
E.—Fannin & Co.'s Half-Minute Clinical Thermometer -	0	2	6
F.—Fannin & Co.'s Clinical Thermometer, with Lens Front Magnifying Index - - - - -	0	2	6
H.—Fannin & Co.'s Half-Minute Clinical Thermometer, with Lens Front Magnifying Index - - - - -	0	4	6
Veterinary Thermometers, in various lengths, } enclosed in protecting Tubes - - - }	3/6	to 0	5 6

SPECIAL QUOTATION FOR QUANTITIES.

Certificates of Corrections determined by comparison with the Standard Instruments at Kew Observatory supplied with each Thermometer for 1s. 6d. extra.

FANNIN & CO. guarantee every Thermometer bearing their name to be standard precision.

BREAKAGE of CLINICAL THERMOMETERS.—From the nature of their construction, Clinical Thermometers are exceedingly fragile, and there is considerable risk of breakage in their transmission either through the post or by any other mode of conveyance. We use every precaution in packing, but do not guarantee safe delivery, and can only supply them at the risk of purchasers.

Fannin & Co., Limited,

Manufacturers of Surgical Instruments and Appliances.

Makers of Artificial Limbs and Orthopædic Apparatus;

41 Grafton-street,

DUBLIN.

38 Wellington-place,

BELFAST.

PERIODICALS WITH WHICH THE DUBLIN JOURNAL OF MEDICAL SCIENCE IS EXCHANGED.

GREAT BRITAIN.

1. Transactions of the Royal Medical and Chirurgical Society. 2) Hanover-square, London, W. London: Longmans.
2. The Edinburgh Medical Journal. Edinburgh: Young J. Pentland.
3. The Lancet.
4. The British Medical Journal.
5. The Journal of Mental Science. London: Churchill.
6. The Glasgow Medical Journal. A. MacDougall.
7. The Medical Press and Circular.
8. Transactions of the Obstetrical Society. London: Longmans.
9. The Practitioner: a Journal of Practical Medicine and Surgery. London: Cassell and Co.
10. The Journal of Anatomy and Physiology. London: Chas. Griffin & Co.
11. The British Gynaecological Journal. London: John Bale & Sons.
12. The British Journal of Dermatology.
13. The Medical Chronicle.
14. The Birmingham Medical Review.
15. The Liverpool Medical Journal.
16. Guy's Hospital Reports. Guy's Hosp., London.
17. The Hospital. London: The Scientific Press Company.
18. The Scottish Medical and Surgical Journal.

CANADA.

19. The Montreal Medical Journal. Box 386, P.O., Montreal, Province of Quebec.

AMERICA.

20. The American Journal of the Medical Sciences. New York and Philadelphia: Messrs. Henry C. Lea, Son, & Co. London: Triibner and Co.
21. The Medical Record. New York: William Wood and Co.
22. Medical News. Philadelphia: Lea Brothers & Co.
23. The American Journal of Insanity. The Johns Hopkins Press, Baltimore.
24. The American Journal of Obstetrics and Diseases of Women and Children. New York: William Wood and Company. London: S. Low, Son, and Marston.
25. The New York Medical Journal. New York: A. R. Elliott Publishing Co.

AMERICA.—continued.

26. Journal of Cutaneous and Genito-urinary Diseases. New York: D. Appleton & Co.
27. The Journal of the American Medical Association. Chicago, Illinois.
28. The Occidental Medical Times. James H. Parkinson, Editor, Sacramento, California.
29. Archives of Pediatrics. New York: E. B. Treat.
30. The Johns Hopkins Hospital Reports, Baltimore, Maryland.

FRANCE.

31. Gazette Médicale de Paris. Paris.
32. Bulletin de l'Académie de Médecine Paris: G. Masson.
33. Annales Médico-Psychologiques. Paris: G. Masson.
34. Gazette des Hôpitaux. Paris: 49 Rue Saint Andre des Arts.
35. Lyon Médical, Organe Officiel de la Société de Médecine. Lyon: Louis Savy.
36. Gazette Hebdomadaire de Médecine et de Chirurgie. Paris: Masson et Cie.
37. La Presse Médicale. C. Naud. 3 Rue Racine, Paris.
38. Revue Hebdomadaire de Laryngologie, d'Otologie, et de Rhinologie. Paris et Bordeaux: Octave Doin.

BELGIUM.

39. Bulletin de l'Académie Royale de Médecine de Belgique. Bruxelles: F. Hayez.

GERMANY.

40. Archiv für Gynäkologie. Redigirt von Gussierow und Leopold. Berlin: August Hirschwald.
41. Centralblatt für die medicinischen Wissenschaften. Berlin: August Hirschwald.
42. Berliner klinische Wochenschrift. Berlin: Hirschwald.
43. Archiv für klinische Chirurgie. Berlin: Hirschwald.
44. Archiv für Psychiatric und Nervenkrankheiten. Berlin: August Hirschwald.
45. Deutsche Medizinal-Zeitung. 21 Wilhelm Strasse, Berlin, S.W.
46. Centralblatt für klinische Medicin. Leipzig: Breitkopf und Härtel.

GERMANY—*continued.*

47. Fortschritte der Medicin, H. Kornfeld. Berlin, W.

48. Die Verhandlungen des Vereins für innere Medicin. Berlin, Dr. Max Meyer, Bibliothekar des Vereins.

NORWAY.

49. Norsk Magazin for Lægevidenskaben. Udgivet af det medicinske Selskab i Kristiania. Kristiania: Paa Th. Steen.

SWEDEN.

50. Hygiea. Stockholm: Samson och Wallin.

51. Nordiskt medicinskt Arkiv. Stockholm: P. A. Norstedt och Söner.

52. Upsala Läkareförenings Förhandlingar. Upsala: Edv. Berling.

DENMARK.

53. Hospitals-Tidende. Optegnelser af praktisk Lægekunst fra Ind-og Udlandet. Kjöbenhavn: Jacob Lund. London: Asher & Co.

54. Bibliothek for Læger. Kjöbenhavn: C. A. Reitzels Forlag (Georg C. Grön).

55. Ugeskrift for Læger. Kjöbenhavn: C. A. Reitzels Forlag.

ITALY.

56. Lo Sperimentale. Via San Galto, 35, Florence.

AUSTRALASIA.

57. The Australasian Medical Gazette. Sydney.

INDIA.

58. The Indian Medical Record. 50 Park-street, Calcutta.

59. Indian Medical Gazette. Calcutta. Thacker, Spink, & Co.

OPEN-AIR TREATMENT of DISEASES of the LUNGS.**DR. W. DENTON JOHNS' SANATORIUM.**

Alderney Manor, Parkstone, Dorset.

An ideal spot, beautifully situated about three miles from Bournemouth. 600 acres of pine woods and heather lands. Specially built for the cure on the **"HUT SYSTEM,"** under the personal supervision of Dr. JOHNS, who resides upon the premises.

SUN BATHING A SPECIALTY.

For terms and particulars
apply Secretary.

MEDICAL PLATES.**MEDICAL PLATES and ILLUSTRATIONS**

EXECUTED IN VARIOUS COLOURS IN THE BEST STYLE BY

JOHN FALCONER,

53 UP. SACKVILLE STREET, DUBLIN.

TAMAR

INDIEN

GRILLON.

A laxative, refreshing, and medicated Fruit Lozenge, very agreeable to take, and never causing irritation. Its physiological action assures the immediate relief and effectual cure of

Constipation,

**Hæmorrhoids, Bile,
Cerebral Congestion, Headache,
Loss of Appetite,
Intestinal Obstruction, &c.,**

By augmenting the peristaltic movement of the intestine without producing undue secretion of the liquids. Unlike pills and the usual purgatives, it does not predispose to intestinal sluggishness: and the same dose always produces the same effect—that is to say, never needs increasing.

It is recommended by the most eminent physicians of Paris, notably Drs. BELIN and TARDIEU, who prescribe it constantly for the above complaints, and with the most marked success.

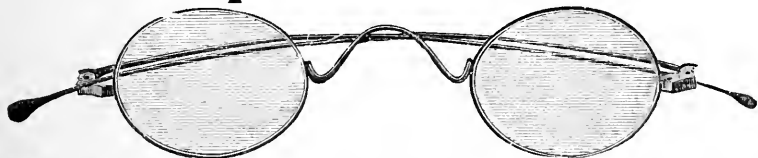
WHOLESALE—

London: E. GRILLON,

67 Southwark Bridge Road, London, S.E.

Sold by all Chemists and Druggists, 2s. 6d. a box, stamp included.

Spectacles.



FANNIN & CO. have recently added a Department for Spectacles to their Establishment, and keep in Stock a large and varied assortment of the different kinds in general use.

They will be pleased to send a number to select from, when required, to members of the Medical profession living at a distance.

Oculists' orders receive careful attention, their instructions are strictly followed, and usually completed in three days.

FANNIN & Co. trust, therefore, to be favoured with support from the profession for this branch of their business, and they feel sure they will succeed in giving every satisfaction.

FANNIN & CO., Ltd.,

Opticians, Surgical Instrument Makers, &c.,

41 GRAFTON-ST., DUBLIN.

The novel shape makes insertion easy and prevents expulsion.
The improved method of manufacture ensures accurate dosage
and even diffusion of active principles.

TRADE
MARK

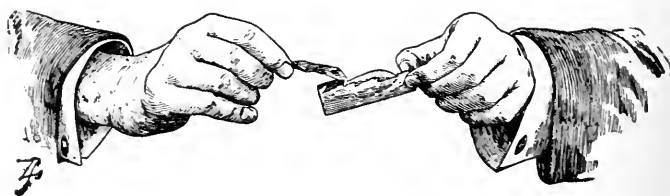
'Enule'

BRAND

Rectal Suppositories

ARE perfectly preserved from contamination or deterioration until the moment of use by the hermetically-sealed sheath of pure tin foil in which each is enclosed. This sheath can be instantly stripped off, as shown below.

The list includes 'Enule' Brand Belladonna Extract, gr. $\frac{1}{4}$, gr. $\frac{1}{2}$, and gr. 1; Bismuth Subgallate, gr. 20; Cocaine Hydrochlor., gr. $\frac{1}{2}$; Glycerin (95 %/5) Children's and Adults'; 'Hazeline' Compound; Lead and Opium; Meat (Predigested); Milk (Predigested); Morphine Hydrochlor., gr. $\frac{1}{4}$, gr. $\frac{1}{2}$, and gr. 1; Opium Extract, gr. 1; Santonin, gr. 3.



Burroughs Wellcome & Co., LONDON & SYDNEY.

[COPYRIGHT]

F 140

THE DUBLIN JOURNAL

OF

MEDICAL SCIENCE.

APRIL 1, 1903.

PART I.

ORIGINAL COMMUNICATIONS.

ART. X.—*The Nomenclature of Disease and Causes of Death.*^a By NINIAN M. FALKINER, M.D., F.R.C.P.I.; Dip. State Med.; Medical Superintendent of Statistics, Registrar-General's Office, Ireland.

I HAVE the honour of addressing you at this the opening meeting of the second year of my Presidency of the State Medicine Section of the Royal Academy of Medicine in Ireland.

I hesitated to do so on the grounds of probably excluding valuable communications from other Fellows of the Academy—the meetings of this Section being limited to two in the Session. However, as I consulted the Council of the Section in reference to my doubt, and as they were unanimous in the opinion that I should deliver an Address, I have deferred to their ruling.

It is, no doubt, known to most, if not all, here that the Committee appointed by the Royal College of Physicians, London, are at present engaged in preparing the Fourth Edition of the *Nomenclature of Diseases*, which will not be issued until the year 1906. As such a considerable time must elapse before its production, my distinguished col-

^a Being the Presidential Address delivered before the Section of State Medicine of the Royal Academy of Medicine in Ireland, on Friday, February 20, 1903.

league and friend, John Tatham, M.D. (Dublin), of the General Register Office, Somerset House, has revised the "list of causes of death," from which the statistical tables of the Registrar-General for England are compiled. This list has been adopted by the Registrar-General for Ireland, with the full approval of the Royal College of Physicians of Ireland.

I propose under these circumstances to give a short account of the history of the evolution of vital statistics in England, from the time that the light of Scientific Medicine appears first to have illuminated (no matter how feebly) this important subject.

I also will point out the modifications which the revised nomenclature will introduce into the reports, with the hope that I may be able to impress on every practitioner of medicine in this country the importance of giving a well-defined and accurate "cause of death" when framing his certificate, as it is on this testimony, and this testimony alone, that the value of the mortality statistics of the Nation depends.

If examples from current literature were necessary to prove the enormous public utility and importance of reliable mortality statistics, no better could be adduced than the Open Letter to the Registrar-General of England, which appeared from the pen of Mr. Stephen Coleridge in the *Contemporary Review* of October, 1902, the answer thereto by Mr. Stephen Paget in November, 1902, and the rejoinder of Mr. Coleridge in December, 1902. I do not intend to review or criticise these articles, but I do ask any medical practitioner who has any doubt on his mind as to the value of accurate mortality statistics, to read these most interesting letters.

The first name that I venture to connect with the classification of disease in these countries is that of William Cullen. "He was born in Lanark in 1710 and died in 1790. He founded a medical school in Glasgow. Among his pupils were William Hunter and the famous Joseph Black. He occupied successively the Chairs of Chemistry, Institutes of Medicine, and Medicine, in Edinburgh, and taught clinical medicine at the Royal Infirmary. For many

centuries all diseases had been referred to disorders of the fluids of the body. Just before Cullen's time Boerhaave added to this a pathology of the fibres, still strongly tinctured with the old fluid or humoural pathology. To Cullen is largely due the recognition of the important part played by the nervous system both in health and disease. He denied the theory supported by Boerhaave that the brain was an excretory organ, and the nervous influence a fluid. Many of his speculations as to reflex nervous action, the possible presence in a single nerve, both of motor and sensory fibres, and the connection of the motor and sensory nerve roots, have now proved to be justified." ^a

The works of Cullen were edited by John Thompson, M.D., of Edinburgh, in 1827, and from this edition the following abstract of Cullen's Nosology is taken :—

CLASS I.—PYREXIE	- Orders	$\left\{ \begin{array}{l} 1. \text{Febres.} \\ 2. \text{Phlegmasiæ.} \\ 3. \text{Exanthemata.} \\ 4. \text{Hæmorrhagiæ.} \end{array} \right.$
CLASS II.—NEUROSES	- Orders	$\left\{ \begin{array}{l} 1. \text{Comata.} \\ 2. \text{Adynamiæ.} \\ 3. \text{Spasmi.} \\ 4. \text{Vesaniæ.} \end{array} \right.$
CLASS III.—CACHEXIE	Orders	$\left\{ \begin{array}{l} 1. \text{Marcores.} \\ 2. \text{Intumescentiæ.} \\ 3. \text{Impetigines.} \end{array} \right.$
CLASS IV.—LOCALES	- Orders	$\left\{ \begin{array}{l} 1. \text{Dysæsthesiæ.} \\ 2. \text{Dysorexiæ.} \\ 3. \text{Dyscinesiæ.} \\ 4. \text{Apocinoses.} \\ 5. \text{Epischeses.} \\ 6. \text{Tumores.} \\ 7. \text{Extopiæ.} \\ 8. \text{Dialyses.} \end{array} \right.$

"The History of Official Vital Statistics in England" may be said to coincide with the work of William Farr, who was born in Kenley in 1807. He appears to have studied medicine in London and Paris, and to have devoted his attention mainly to vital statistics and to the questions connected therewith.

A letter appears from him in the first Report issued by the First Registrar-General for England (Mr. J. H. Lister), dated May 16th, 1839. This Report contains an abstract

^a Chambers' Encyclopædia.

for the year ending June 30th, 1838. Up to 1837 the vital statistics had been in the hands of the Parish Registrars, who furnished weekly "bills of mortality."

Central registration did not up to this period obtain in England, and although over sixty years have elapsed since the first Report of the English Registry Office was issued, the words of the great chief of English medical statistics which appear therein may still, from their wisdom, beauty, and power, be listened to with advantage.

"Any improvement in the treatment of disease, and any addition to medical science, will tend ultimately to the diminution of human suffering, but the registration of causes of death is calculated to exercise a still more direct influence upon public health.

"Diseases are more easily prevented than cured, and the first step towards prevention is the discovery of their exciting causes.

"The Registry will show the agency of these causes by numerical facts, and measure the intensity of their influence. The annual rate of mortality will be found in some districts to be 4 per cent., and in others 2 per cent. In other words, the people in one set of circumstances live for fifty years, and in the other set of circumstances, which the registration will indicate, they do not live more than twenty-five years.

"In these wretched districts nearly 8 per cent. are constantly sick, and the energy of the whole population is withered to the roots. Their arms are weak, their bodies wasted, and their sensations embittered by privation and suffering. Half the life is passed in infancy, sickness, and dependent helplessness.

"In exhibiting the high mortality, the disease by which it is occasioned, and the exciting causes of the disease, the abstract of the Register will prove that, while a part of the sickness is inevitable, and a part can only be expected to disappear before progressive and social amelioration, a considerable portion of the sickness and deaths may be suppressed by the general adoption of hygienic measures, which are in actual but partial operation.

"It may be affirmed without great risk of exaggeration

that it is possible to reduce the annual deaths in England and Wales by 30,000, and to increase the vigour (may I not add the industry and wealth) of the population in an equal proportion, for 'diseases are the iron index of misery, which recedes before strength, health and happiness as the mortality declines.' "

From the views held at the time that William Cullen lived and worked, it is clearly evident that much light had been thrown on the nature of the diseases which caused death at the time that the first Report of the Registrar-General for England appeared. In it William Farr gives the first official classification of causes of death.

He classified these causes under three primary divisions. The first division included endemic, epidemic, and contagious diseases. The second division included the so-called sporadic diseases, or those arising in an isolated manner from ordinary causes, or from causes existing in the organism itself, and the third division including deaths from violence. This classification is apparently a development from the earlier division of causes of death into (1) plagues, and (2) sporadic diseases.

The establishment of central registration of deaths in England preceded the compilation of the Report of the First Registrar-General of Scotland (W. P. Dundas) by eighteen years. During that period Wm. Farr, since a Fellow of the Royal Society, had modified his Nosology, had abandoned the division of causes of death into plagues and sporadic diseases, and had adopted a classification consisting of seventeen groups, with 104 causes of death; the first, or zymotic group, corresponding to what in the previous nosology comprehended the endemic, epidemic, and contagious diseases: the second group of diseases of uncertain or variable seat include hæmorrhage, ulcer, cancer, and gout, which, according to our ideas, form a strangely incongruous family.

The registration of births and deaths was established in Ireland in 1864, twenty-seven years in the wake of the English office, and nine years after the foundation of the Registrar-General's Office in Scotland. Before the Irish office existed in its present state, Mr. William Donnelly,

C.B., was Registrar-General of Protestant Marriages from the year 1845. He became in 1864 Registrar-General of Marriages, Births and Deaths for Ireland, and continued in office until 1876, during which period Dr. W. Malachy Burke was Medical Superintendent of Statistics in his office. In 1876 Mr. Donnelly retired, and Dr. Burke was appointed Registrar-General, holding that office in combination with the post of Medical Superintendent of Statistics. He lived but three years after his appointment as Registrar-General, dying in the August of 1879. He was succeeded by Dr. Thomas Wrigley Grimshaw, C.B., whose memory, both for his kindly personality, and also for his useful and energetic career, is still green in the recollection of all the members of this Section of the Academy, of which he was an honoured ex-President, and a valuable and faithful ally.

The first annual detailed Report on Vital Statistics for Ireland was issued for the year 1864. In the classification therein adopted a change from that used for the Reports in England and Scotland in 1855 is found to have been made in accordance with a nomenclature of disease which had been framed by William Farr. This classification, with modifications from time to time, has been used in the official reports up to the present time.

STANDARD NOMENCLATURE.

In the year 1864 the Registrar-General for Ireland issued to every member of the medical profession in Ireland a copy of Dr. Farr's "Nosology," which had been issued to the profession in England in the year 1845 by the Registrar-General for England.

In 1869 the Joint Committee on the Nomenclature of Diseases, which had been appointed by the Royal College of Physicians of London in 1857, issued the First Edition of their work. Dr. W. M. Burke had joined this Committee subsequently to the year 1864.

The scheme of this "Nosology" divided the causes of death as follows:—

A. General Diseases---

- a. Infectious Diseases.
- b. Constitutional.

B. Local Diseases.

1,146 causes of death, or rather illnesses, are herein given, not including 3 appendices on—

1. Operations.
2. Parasites.
3. Congenital Malformations.

In 1885 the First Revision was issued. Dr. Grimshaw is thanked in the preface, with others, for the help rendered to the Committee, but by a clerical error he is described as Dr. Graham, Registrar-General for Ireland.

The Committee, in this edition, abandoned the division of diseases into general and local, adopting instead of the former four groups:—

Group A.—Diseases dependent on morbid poisons.

Group B.—Diseases dependent on external agencies other than morbid poisons.

Group C.—Developmental diseases.

Group D.—Not classified.

The division local diseases was retained.

As in the previous edition, the name of each cause of death is given in Latin, French, German, Italian, and English.

The next edition was issued by the Nomenclature Committee in the year 1896.

It is to be regretted that there is a conspicuous absence on the Revision Committee of the Third Edition of this important publication of any representative from Ireland, either from the Royal College of Physicians or from the Office of the Registrar-General. In this edition the division of causes of death into general and local diseases is restored, and is to be in future the standard of Nosological Classification for Great Britain and Ireland.

In the words of Dr. Tatham, who succeeded Dr. Ogle on the Revision Committee which had been appointed by the College of Physicians of London in 1892, "The list of causes of death published in our annual reports has remained practically unchanged for the last twenty years, notwithstanding that two separate editions of the Nomenclature of Diseases have been published by the Royal College of Physicians of London during that period."

The Registrar-General has determined to discontinue the present classification in the 1901 Report, and proposes to divide diseases into (a) General Diseases, and (b) Local Diseases, the latter being grouped for convenience according to organs, or systems affected.

The use of such terms as "zymotic," "miasmatic," "constitutional," &c., to describe groups of "general diseases," differing widely as they do with respect to their ætiology, can no longer be justified.

The main objects in revising the list of causes of death were:—

(1.) To bring statistics of mortality into line with the official nomenclature of the College of Physicians, taking care to interfere as little as possible with the comparability of the new tables and those of past years.

(2.) To endeavour to induce practitioners to be more exact in certifying causes of death by providing additional lines in certain cases in the National Records of Mortality.

A careful revision of the list modified by Dr. Tatham from the "Official Nomenclature (1896)" shows the following changes which have been approved by the Royal College of Physicians of Ireland, and have been adopted by the Registrar-General for Ireland:—

1. Puerperal Phlegmasia Dolens -	Childbirth	-	to Gen. Dis., Gr. A
2. Infectious Endocarditis	- Heart, B, V	-	" "
3. Epidemic Pneumonia	- Respiratory	-	" "
4. Phlegmon. Carbuncle	- Skin	-	" "
5. Lupus	-	-	" "
6. Rheumatism of Heart	- Not in N.	-	" "
7. Injury at Birth	-	-	" "
8. Atelectasis	- Respiratory	-	" "
9. Dentition	- Digestive	-	" "
10. Mastoid Disease	- Not in N.	-	to Otitis, Gr. B II.
(a) Cerebral Hæmorrhage	} Nervous	}	to Circulatory, Gr. B IV.
(b) Cerebral Embolism			
11. (c) Cerebral Thrombosis			
(d) Apoplexy			
(e) Hemiplegia			
12. Gastro-enteritis	- Not in N.	-	to Digestive
13. Appendicitis	-	-	" "
14. Old Age	- from Group A	-	to Ill-defined
15. Ascites	- Diseases of Liver	-	" "

New List of Causes of Death as used in the Annual Reports of the Registrars-General for England and Wales, Scotland, and Ireland &c:—

GENERAL DISEASES.

Small-pox { Vaccinated.
Not Vaccinated.
Doubtful.
Cow-pox. Effects of Vaccination.
Chicken-pox.
Measles (Morbilli).
Epidemic Rose Rash.
Scarlet Fever.
Typhus.
Plague.
Relapsing Fever.
Influenza.
Whooping-Cough.
Mumps.
Diphtheria (*Membranous Croup*).
Cerebro-Spinal Fever.
Simple Continued Fever.
Enteric Fever.

Asiatic Cholera.
Epidemic Diarrhœa, Epid. (or
Zym.) Enteritis.
Diarrhœa, Choleraic Diarrhœa.
Dysentery.
Malarial Fever.

Hydrophobia.
Glanders, Farcy.
Anthrax, Splenic Fever.
Tetanus.
Syphilis.
Gonorrhœa, Stricture of Urethra.

Puerperal Septicæmia, Sapræmia.
Puerperal Pyæmia.
Phlegmasia Alba Dolens.
Puerperal Fever.

Infective Endocarditis.
Epidemic Pneumonia, Pneumonic
Fever.
Erysipelas.
Septicæmia, Sapræmia (not Puer-
peral).
Pyæmia (not Puerperal).
Phlegmon. Carbuncle (not Anthrax)
Phagedæna.
Other Septic Diseases.

Tuberculous Phthisis (Pulm. Tubercu-
culosis).
Phthisis (not otherwise defined).
Tuberculous Meningitis.
Tuberculous Peritonitis.
Tubes Mesenterica.
Lupus.
Tubercle of other Organs.
General Tuberculosis.
Scrofida.

Parasitic Diseases.

Starvation.
Scurvy.
Alcoholism. Delirium Tremens.
Opium, Morphia Habit.
Poisoning by Ptomaines and other
Food Toxins.
Industrial { by Lead.
Poisoning { by Phosphorus.
 { by Arsenic and other
 { Metals.
Rheumatic Fever, Acute Rheuma-
tism.
Rheumatism of Heart.
Chronic Rheumatism.
Rheumatic Arthritis, Rheumatic
Gout.

Carcinoma.
Sarcoma.
Cancer, Malignant Disease (not
otherwise defined).

Rickets.
Purpura.
Hæmophilia, Hæmorrhagic Dia-
thesis.
Anæmia, Leucocythæmia.
Diabetes Mellitus.

Premature Birth.
Congenital Defects.
Injury at Birth.
Atelectasis.
Want of Breast Milk.
Teething.

* The terms printed in *italics*, being the names of symptoms merely, or being unauthorised or otherwise objectionable, should be used, in Medical Certificates, only when precise information is unobtainable.

LOCAL DISEASES.

DISEASES OF NERVOUS SYSTEM—

Meningitis, Inflammation of Brain.
Softening of Brain.
General Paralysis of Insane.
Insanity (not Puerperal).
Chorea.
Epilepsy.
Convulsions.
Laryngismus Stridulus.
Locomotor Ataxy.
Paraplegia and Disease of Cord.
Neuritis, Periph. Polyneuritis.
Brain Tumour (not specific).
Nervous System, other Diseases.

DISEASES OF ORGANS OF SPECIAL SENSE—

Otitis, Mastoid Disease.
Epistaxis, Nose Disease.
Ophthalmia, Eye Disease.

DISEASES OF HEART—

Valve Dis., Endocarditis (not Infective).
Pericarditis.
Hypertrophy of Heart.
Angina Pectoris.
Dilatation of Heart.
Fatty Degeneration of Heart.
Syncope, Heart Disease (not otherwise defined).

DISEASES OF BLOOD VESSELS—

Cerebral Hæmorrhage, Emb., Throm.
Apoplexy Hemiplegia.
Aneurysm.
Senile Gangrene.
Embolism, Thrombosis (not Cerebral).
Phlebitis.
Varicose Veins.
Blood Vessels, other Diseases.

DISEASES OF RESPIRATORY ORGANS—

Laryngitis.
Membranous Laryngitis (not Diphtheritic).
Croup (not Spasmod. or Membr.)
Larynx, Trachea, Diseases of (not otherwise defined).
Bronchitis.
Lobar, Croupous Pneumonia.
Broncho, Catarrhal, Lobular—Pneumonia.
Pneumonia (not otherwise defined).
Emphysema, Asthma.
Pleurisy.
Fibroid Disease of Lung.
Respiratory Diseases, other.

DISEASES OF DIGESTIVE SYSTEM—

Tonsillitis, Quinsy.
Mouth, Pharynx, Oesophagus, Disease (not specific).
Gastric Ulcer.
Gastric Catarrh.
Stomach, other Dis. (not Malig.).
Enteritis (not Epidemic).
Gastro-Enteritis.
Appendicitis, Perityphlitic.
Hernia.
Intestinal Obstruction.
Other Diseases of Intestines.
Peritonitis (not Puerperal).
Cirrhosis of Liver.
Liver and Gall-bladder, other Diseases.
Digestive System, other Diseases.

LYMPHATIC, &c., DISEASES—

Spleen Disease.
Lymphatic System, other Diseases
Thyroid Body Disease.
Supra-renal Capsules Disease.

DISEASES OF URINARY SYSTEM—

Acute Nephritis, Uræmia.
Chronic Bright's Disease, Albuminuria.
Calculus (not Biliary).
Bladder and Prostate Disease.
Urinary System, other Diseases.

DISEASES OF GENERATIVE SYSTEM—

Ovarian Tumour (not Malig.).
Other Diseases of Ovary.
Uterine Tumour (not Malig.).
Other Diseases of Uterus and Vagina.
Disorders of Menstruation.
Gener. and Mam. Organs, other Diseases.

ACCIDENTS OF CHILDBIRTH—

Abortion, Miscarriage.
Puerperal Mania.
Puerperal Convulsions.
Placenta Prævia, Flooding.
Other Accidents of Pregnancy and Childbirth.

JOINT DISEASES—

Caries, Necrosis.
Arthritis, Periostitis.
Other Diseases of Locomotor System.

SKIN DISEASES—

Ulcer, Bedsore.
Eczema.
Pemphigus.
Skin Diseases, other.

ART. XI.—*The Utilisation of our Climate in the Treatment of Tuberculosis in the Home.*^a By J. R. GARRATT, M.D., B.Ch., B.A.O., B.A. Univ. Dublin.

It has often been said that the climate of the British Isles belongs to the most health-giving in the world for the vigorous, but is less adapted for the invalid. If, however, a tubercular subject is obliged to stay at home, it is often possible for him, by judicious management, to obtain great benefit by availing himself of all the advantages, and defending himself from the injurious influences of our home climate. Although we must admit that the climate of our island is rather moist, that the air is often dull and sunless, that rain falls on comparatively many days, and is distributed over many hours, that the wind is often high and keen, and that the shelter is limited, still it is no worse than many places where good results have been obtained.

At Falkenstein and Hohenhonnef they have as good records as at Davos or St. Moritz. Although these latter places have great climatic advantages, the others make up for this by their attention to hygiene, diet, and especially the open-air treatment.

Hermann Weber and Michael G. Foster, in their joint article on "Climate in the Treatment of Disease," in Dr. Allbutt's "System," lay it down as an axiom that "Pure air and water, the possibility of spending a great part of the day in the open air, good hygienic and dietetic arrangements, and the presence of a good local physician conversant with the peculiarities of the climate and of the entire locality, are the most necessary conditions." They have arranged in their article seven points for the invalid to study under the guidance of his physician:—

- (1.) The selection and arrangement of his rooms for air and other hygienic influences.
- (2.) The arrangement of his meals as to quality, quantity, and time.
- (3.) How to be as much as possible in the open air.

^a Being a thesis for the Degree of Doctor of Medicine in the University of Dublin, read on February 23, 1903.

(4.) What kind and amount of exercise to take, and at what times, and at what times of the day, and when to rest.

(5.) How to clothe himself at different times of the day and of the season.

(6.) How to manage the skin.

(7.) How to occupy the mind.

They further add: "Without due attention to these points many cases, even at the best resorts, are not benefited; with it good results can be obtained even at inferior localities."

(1.) As regards the selection of rooms. The majority of the great sanatoria have a southern aspect, and, if it be possible, our patients' rooms should have a similar aspect, though some dozen or more institutions face all directions, showing that it is not essential.

As regards cubic space, from 1,500 to 3,000 cubic feet. Indeed there is no advantage in having a large cubic space. The essential is ventilation. Nineteen institutions have their bedrooms ventilated by open windows alone, some having fanlights: whilst eleven, including our National, have open windows, together with open fires or chimneys. In other words, the conditions one ordinarily finds in every house.

(2.) As regards the arrangement of his meals as to quality, quantity, and time. An abundant and varied dietary, in which milk, butter, fat, and vegetables occupy an important place. The object of the dietary is to increase the weight gradually to the normal, or above the normal, value, for, as Weir-Mitchell has shown, a gain in weight, up to a certain point, goes hand-in-hand with a gain in all other essentials of health.

The quantity of food eaten must be considerable: must at least equal in amount that which is eaten by an ordinarily healthy individual.

As regards time. Eight o'clock breakfast; one o'clock for lunch. Previous to this the patient should be resting at full length for an hour in the open air or at an open window. This should be his chief meal of the day. Seven o'clock for supper. Before this meal, too, he should rest for an hour on a sofa chair.

(3.) How to be as much as possible in the open air. In no part of the system of treating tuberculosis will the physician encounter so much prejudice as when he comes to open the window on a cold day. It will take all his tact and perseverance to gain his object, for he must carry his patients and their friends with him, and not oppose them, or else they will surely cheat him when his back is turned.

Continually the statement is made that they are too delicate to stand the exposure. Now, it has been found by experience that no amount of exposure to wet or any variation of temperature causes the most delicate patient to contract what is termed a chill, or to suffer any other harm, so long as an open-air life is led and the exposure is constant. If patients are well nourished, sufficiently clothed, and sheltered from the wind, any degree of cold may be defied. At Falkenstein, for example, patients may be seen lying out of doors for hours during thick fog, and even in snow-storms, with a temperature below freezing point. The famous sanatoriums at the Black Forest have a moist, raw climate during many months of the year, and their patients do just as well during these months. So we may conclude that no day is too bad but that benefit may be derived from it.

Our chief enemy is wind. Blumenfeld and others have shown that exposure to winds, more especially to cold winds, is injurious, and the conclusions of these observers are borne out by the experience of all sanatorium authorities. If a storm rages on the front of the house the back must be free, and there our patients may at least rest at an open window. If it be merely a keen wind, some road will be found to give shelter.

People are vastly too much afraid of rain, and to send our patients out with the dread that rain will come on and that they must hasten back is exceedingly bad. Mere wet does no harm so long as our patients do not hurry and exhaust themselves. Let them walk slowly and deliberately as usual, and, on their arrival, have dry clothes awaiting them.

For the well-to-do, a great help in the administration of open-air is the erection of a well-built hut, large enough to

accommodate a sofa couch in any dimension. A narrow door placed in the north wall gives entrance. By a judicious management of the four large windows—one to each side of the hut—our patient may enjoy a free current of air, and at the same time be out of a draught. At first, in cold weather, the feet are apt to become cold, and the inmates need hot jars, but after a little while they dispense with these, and never seem to need them again, even on the bitterest of days. Here it is that our patient should rest for an hour before his mid-day and evening meal; here he may spend the greater part of the wet and blustering days.

(4.) What kind and amount of exercise to take, and at what time of the day, and when to rest. The amount depends altogether on the state of the case—the mere act of dressing being sufficient for the weak. The kind largely depends on his means. However, the best form of exercise is within the reach of all—regular up-hill climbing. Let it be done gradually and deliberately on a slight gradient at the rate of two miles an hour. Slow driving in open carriages or horse-back, as Sydenham advocates. The time of the day to rest is before the two chief meals—whether one sides with Dettweiler in prescribing rest in verandahs in the place of exercise, or with Sir H. Weber (an equally great authority), who says that rest gives rise to mental depression, and has a lowering influence on the vitality of the body.

Moreover, too much rest in the recumbent posture gives rise to indolence, and many patients treated this way never seem to regain enough energy to resume their work—a serious drawback to those of slender means; for one of the great points gained by treating a patient in his own home is that we effect a cure under the conditions which are the same as those he lives in.

(5.) How to clothe himself at different times of the day and of the season. Warm inner flannels for the day time, which should be equal as regards warmth to the night flannels, so that no difference may be felt in changing. A good supply of light over-clothes, so as to permit of many changes in case of wet. No muffling is allowed. In the case of ladies, shorter skirts and gaiters should be worn,

both for ease in walking and to obviate the discomfort of wet ends to the skirts.

(6.) How to manage the skin. The best way of improving the action of the skin, and at the same time diminishing the liability to what is termed a chill, is by the use of some form of shower-bath, combined with friction, supposing provision to be made that the patient does not tire himself by too vigorous drying. Cold water is used, or tepid for the weak. For tubercular lesions of bones sea-bathing has long been of service.

(7.) How to occupy the mind. Owing to the influence of the mind upon the body all that tends to make the patient happy and cheerful should be permitted. All that is cheerless and depressing should be banished from his surroundings.

There is one form of occupation for the mind that has its drawbacks—visitors. Every medical man has observed in hospital how the temperatures of the patients invariably go up after visiting day. Whether visitors do so much harm in the patient's home, where he is surrounded by all that he would otherwise be mentally picturing, is open to doubt. But some people have the habit of becoming excited when they talk, and so excite their listener. Moreover, there is the ever present danger of friends being the means of introducing the germs of "feverish cold," of "influenza," or of the exanthemata. Gerhardts puts it—"Few people die of disappointment, but tuberculosis is a grave disease." So, in the home, where the patient has plenty to amuse him, he is better without many visitors.

ART. XII.—*Dysentery amongst the Troops in South Africa, with its Treatment.*^a By J. H. DOUGLASS, M.D., M.B., B.Ch., B.A.O. Dublin University, and L.M. Rotunda, Dublin; late Civil Surgeon to the Forces in South Africa.

IN writing on such a subject as dysentery, one must bear in mind the wide diversity of symptoms which this disease

^a Being a thesis for the Degree of Doctor of Medicine in the University of Dublin, read on February 23, 1903.

creates in different countries, and to use the word "dysentery" as a term applied to what is probably a group of diseases, of which the principal pathological feature is inflammation of the mucous membrane of the colon, and of which the leading symptoms are pain in the abdomen, tenesmus, and the passage of frequent small stools containing mucus, or mucus and blood. It would not be incompatible, I think, before going on to describe the differences in the symptoms and treatment of dysentery in South Africa, to describe an ordinary typical case of acute dysentery.

A common history to get is that the patient has suffered from an attack of ordinary diarrhœa. The stools at first copious, bilious and watery—from four to five in number in the twenty-four hours—had latterly and by degrees become less copious and more frequent, less fæculent and more mucoid, their passage being attended by a certain and increasing amount of straining and griping. On looking at what was passed, the patient had discovered that now there was very little except mucus tinged or streaked with blood, about a tablespoonful being passed at a time. Later on the desire to go to stool has become almost incessant, the effort to pass something being accompanied by agonising griping and tenesmus. There is very little fever with all this suffering—the thermometer showing a rise of only one or two degrees.

In another type of case the commencement is much more abrupt. Within a few hours of its commencement the disease is in full swing.

In either case, after four to six days, the urgency of the symptoms may gradually diminish, and the acute stage taper off into a subacute or chronic condition, or it may terminate in perfect recovery.

If well treated, and the epidemic is not of great malignancy, you come to look at the sequelæ as more dangerous than the disease, for however mild the case may be, and perhaps after months, and even a year, of comparative good health, and when dysenteric symptoms had long ceased to trouble the patient, and had perhaps been forgotten, there is suddenly sprung on you the gravest of all the sequelæ of this disease—the patient gets "abscess of the liver."

To bring this point more graphically before you, and also to show you the methods adopted in some of the hospitals in South Africa, I will read to you the medical case sheet of a patient under my charge at No. 8 General Hospital, Bloemfontein. This case came under my charge as a case of "Debility."

MEDICAL CASE SHEET.

Regimental No.—7,085. Surname—Lynch. Christian Name—Larry. Age—20. Rank—Private. Unit—Royal Irish Fusiliers. Service—1 $\frac{1}{2}$. Date—No. 8, Gen. Hospital, Bloemfontein, Sept. 20th. Disease—Abscess of Liver.

History.—Patient was admitted to hospital in August, 1902, at Springfontein, suffering from a constant pain on his right side about the region of his liver.

Previous History.—In June, 1901, patient had enteric fever, and when convalescent in August, 1901, he got an attack of dysentery, which lasted about a month. Patient kept in good health till about a fortnight before his admission into Springfontein Hospital in August, 1902.

Symptoms and Signs.—Patient complains of a sharp pain in the region of his liver on the right side, corresponding to the middle of his eighth rib. This pain is constant, and is increased on movement. The liver is enlarged downwards. The patient looks pale and debilitated, but has no diarrhoea or other symptoms of dysentery.

On September 25th he had a slight rise of temperature, which lasted to the 28th, and on October 5th his temperature rose from normal to 103.4°.

On October 25th a small swelling was noticed over the liver in a line with the eighth rib, but it was associated with no temperature.

On the 26th the swelling increased in size and the temperature went up to 100.°

On the 27th the patient was taken to the theatre and a needle was inserted, which showed the presence of pus. An incision was then made along the border of the eighth rib into the liver, and pus in large quantities was evident, showing the presence of a large abscess. The incision was enlarged, and a large sized drainage tube inserted. The temperature in the evening fell to normal, but rose a degree in the morning, since when the patient's temperature has been normal.

Three cultures were made from the pus—two being sterile, the third containing a colony of staphylococci.

Nov. 10th, about six days after the operation, bile appeared in the discharge, and has been present ever since. The patient's condition has greatly improved, his anæmic appearance having disappeared.

As regards this case, you see it was about a year from the time he got his attack of dysentery that symptoms of liver abscess appeared. During the interval he was doing garrison duty at Edenburg, and felt in comparative good health.

The organisms in this case were sought for both in the stools and pus from the abscess without success, and culture tubes were inoculated with the pus from the abscess, with the result that two out of the three were sterile, while the third contained a small colony of staphylococci, which was probably accidental.

This long interval between the attack of the disease and the appearance of a liver abscess was often seen in South Africa, although it is met elsewhere, and I think it is a peculiar aspect of dysentery in South Africa. Cases in which the abscess was single generally recovered, whilst in those with multiple abscesses the case was the reverse. Early appearance of bile in the wound after operation seemed a good prognostic sign.

As regards the aetiology of the disease, it is attributed to polluted water and infection of food from faecally impregnated soil by means of flies and dust storms.

Treatment.—As regards treatment, the dysentery in South Africa seemed to differ from that in India by the fact that ipecacuanha, even up to drachm doses, had very little effect on the disease, and in some of the worse cases apparently no effect whatever.

Calomel in small doses frequently given did some good, especially if combined with tonics. Salines in the form of sulphate of sodium or sulphate of magnesium in drachm doses every hour until motions become copious, faeculent and free from blood and mucus, generally effected a cure. It is best given with cinnamon water, which hides the taste, and also seems to have some beneficial action on the disease itself.

Enemata of warm water with boric acid give temporary relief from the tenesmus. The great thing, however, is rest. Keep the patient warm in bed, and put him on a fluid diet of milk only, or milk with soda or lime water, for the first few days; then, as the disease abates, give arrowroot, chicken soup—all of which must be warm.

The patient must not be allowed to get out of bed, and must keep perfectly quiet. When he has a call to stool he must use the bed-pan, and, if possible, resist the desire to go to stool as often as possible—the spasm passing away if resisted; and if this is done for several times the patient has the satisfaction of passing a larger motion, which causes him less pain and straining.

Now, as regards the treatment by sulphur. The use of sulphur in dysentery was suggested on the analogy of the treatment of anthrax by sulphur. Ipecacuanha was formerly used locally in the treatment of anthrax, and it was natural to suppose that if sulphur was a more successful germicide in case of anthrax, it might probably be a correspondingly more successful treatment in dysentery.

The results of its administration in dysentery in South Africa have been amply justified. In the first place, the great advantage it has over ipecacuanha is that there is no vomiting. Neither is it necessary to starve the patient as it is preparatory to administering ipecacuanha, and, however careful you may be both by preventing food being given for some hours before, and also by administering a small dose of tinct. opii about half an hour before you give the ipecacuanha, nevertheless you may very often get vomiting, and valuable time is wasted. Another advantage is that you can give farinaceous diet from the first.

As regards the dose of sulphur, 20 to 30 grains of sublimed sulphur combined with 5 grains of Dover's powder, made up with mucilage and flavoured with syrup of orange, is given every four hours in acute cases. With chronic cases you can dispense with the Dover's powder and less sulphur is necessary.

From the administration of the first powder the patient generally felt more comfortable, the diarrhoea, tenesmus,

and griping pains were relieved, and blood and mucus left the stools in a few days.

The opium in the Dover's powders comforts the patient, and keeps the ulcerated portion of the bowel at rest, and allows the antiseptic powers of the sulphur to take effect.

As regards the way sulphur acts nothing definite is known, but probably the sulphuretted hydrogen and other sulphur acids which are formed in the bowel inhibit the growth of the micro-organisms of dysentery.

Again, the drug may do good by its mild purgative action, since it increases the secretion of the intestinal juice, and stimulates slightly the muscular coats. Whatever its action is, the fact remains that you can generally get a cure in about a week if the case is taken in hand early in the disease.

Of all the cases that passed through my hands in which I administered sulphur, all, as far as I can gather, recovered completely, and some of the patients whom I met months afterwards told me that they had no signs of recurrence or symptoms of liver abscess. I also found sulphur did extremely well in cases of chronic diarrhœa, and in some patients, who had had diarrhœa ever since they arrived in the country, it managed to effect a cure. I also tried it on a few bad cases of enteric, in which I suspected extensive ulceration near the ileo-cæcal valve, and I must say it seemed to do good, especially in one of the cases where there was a great deal of local peritonitis, and in whom I was afraid of perforation. Of course in these cases I gave small doses guarded by opium on account of the purgative action of the sulphur.

In conclusion, I must say I place great faith in sulphur in the treatment of dysentery, not only from my own experience, but also from what I have heard from other medical men in South Africa. And I believe that in future dysentery will be treated by sulphur combined with rest, diet and tonics.

CANTRELL & COCHRANE'S



MINERAL WATERS

DUBLIN & BELFAST

CANTRELL & COCHRANE, LTD.

MINERAL WATER MANUFACTURERS.

DUBLIN & BELFAST.

32 GOLD AND PRIZE MEDALS AWARDED.

Established in 1852, we are the original makers of Aromatic GINGER ALE. Our brand holds the premier position for excellence in every market throughout the world.

We also manufacture with the same care and high-quality materials various Beverages (appended is a short description of the most popular) some of which have distinctive medicinal properties, but all supply a healthful and pleasing variety for the palates of consumers.

The waters used by us for compounding are obtained in BELFAST from the famous CROMAC SPRING, and in DUBLIN from the historic WELL of ST. PATRICK. These springs have been for ages renowned for their purity, and are now enclosed in the grounds of our respective Factories.

We bottle and pack for Wholesale Export as shewn on cover.

The public who may have any difficulty in procuring our Beverages will oblige by writing direct to us for the address of our nearest agent.

AROMATIC GINGER ALE.

WE are the original manufacturers of this celebrated beverage. From its delightful aroma, matchless purity, and true carminative qualities, it has obtained the appellation of "The Beverage of the World." It is wonderfully exhilarating, but perfectly non-intoxicating. As an agreeable aromatic beverage, it is equally suitable for warm or cold weather, and has the additional claim to superiority over all other drinks of a kindred nature by the fact that it does not lose effervescing properties by being decanted. It is as clear and sparkling as champagne.

"CLUB SODA."

A NEUTRALIZER of the lactic acid in the blood, which is the cause of Rheumatism and similar affections; an antidote to acid dyspepsia, and a promoter of digestion. It is considered to be the most wholesome daily beverage that can be taken.

SUPERIOR LEMONADE.

THIS well-known beverage needs no encomium, the manufacture of Messrs. CANTRELL & COCHRANE being so long and so favourably known over the civilized world.

CLUB CIDER.

THIS healthful and delicious beverage is one of the most popular which we make, especially with our juvenile customers; it is flavored with Pine Apple Juice obtained by us direct from the fruit, thus keeping its bouquet no matter how long decanted.

SPARKLING MONTSEERAT.

THIS unique beverage has the pleasant acidity of the Lime Fruit, and that proper measure of sweetness which make certain fruits so refreshing to the system. It is particularly recommended to those suffering from Gout or Rheumatism.

CLUB KOLA.

THIS beverage is made from an extract of the Kola Nut that grows in South Africa, the use of which enables the natives to undergo the utmost fatigue without any other food for long periods. As a nerve tonic our preparation cannot be excelled, particularly when the system is reduced by over indulgence in alcohol.

ROYAL SELTZER WATER.

THIS Aerated Water combines the mildly alkaline and tonic saline properties of the genuine water of the Seltzer spring, with a full charge of carbonic acid, and presents them in the form of a most refreshing, exhilarating and restorative beverage.

SARSAPARILLA

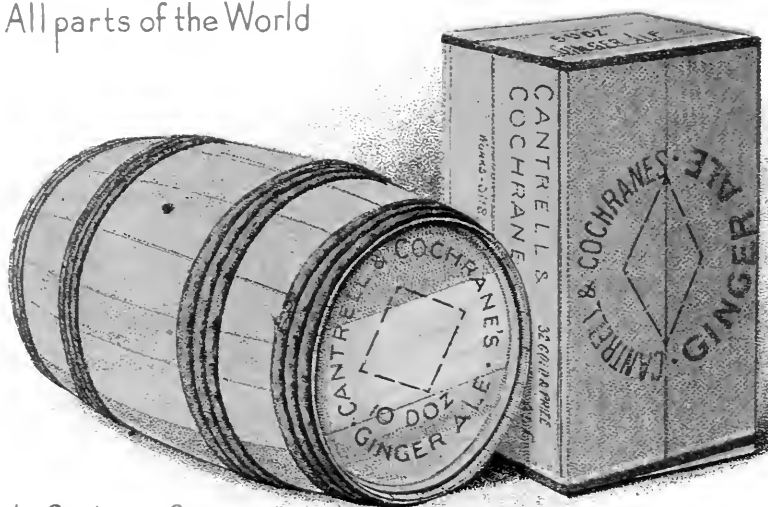
HAS obtained a wide celebrity as the most effectual preparation of this famous Blood Purifier. The Medical faculty recommend it.

CANTRELL & COCHRANE'S

WORLD-FAMED

Table Waters

As Shipped to
All parts of the World



In Casks or Cases

MANUFACTORIES

Nassau Works * Cromac Building.

DUBLIN - BELFAST,
IRELAND.

ART. XIII.—*Diphtheria*.^a By ROBERT G. H. TATE, M.D.
Univ. Dublin.

THE above name has been given to an affection characterised by a local fibrinous exudate, usually upon a mucous membrane, and by constitutional symptoms due to toxins produced at the site of this lesion. The disease was well known in ancient times, Galen having handed down a description of it to us, and epidemics of it are recorded as having occurred during the Middle Ages. By the writers of these times it was known by many names, such as "Angina Suffocativa," "Putrid Throat," "Spotted," "Malignant," "Erysipelatous," and "Gangrenous" sore throat, until a Frenchman—Bretonneau, of Tours—classed all these affections under one head, and named them "Diphthérie."

The disease, which is highly infectious, is endemic in the larger centres of population, though it also occurs in a sporadic manner in less closely populated districts. It also shows a marked tendency to become epidemic at certain seasons of the year, and it is worthy of note that these seasons are those in which scarlet fever, measles, and other diseases which affect the respiratory system are most commonly found to be prevalent. In fact, it was remarked to me by a doctor in charge of a large fever hospital, that he never was sure that a patient in the scarlatina wards would not contract diphtheria, and *vice versa*, until he saw him out of the establishment. Indeed, there seems to be, from his observations, some subtle affinity between the two diseases of which he could offer no explanation.

The cold, damp weather of autumn seems to be most suitable for the growth and spread of the disease. No infectious disease appears to be so fatal to physicians and nurses, probably owing to the fact that it is almost impossible to escape direct contamination from the patient during the processes necessarily gone through whilst examining the affected throat on the physician's part, and cleansing and feeding on the nursing attendant's part.

^a Being a thesis for the Degree of Doctor of Medicine in the University of Dublin, read on February 23, 1903.

Bedding, clothes, books, and utensils used by the patient are most tenaciously infected by the virus, and are capable of retaining the poison for very considerable periods. A child's toys are said to have carried the disease to another individual after having been kept for five months in a dark cupboard. These articles are most probably infected by bacilli derived from the mucus and pieces of membrane coughed up by the patient, which dry and set free the organisms.

A noticeable feature about the disease is the close relation which appears to exist between its presence and the existence of faulty drainage or polluted water supply in the neighbourhood. This connection of facts has been the cause of much controversy, some authorities stating that the emanations from faulty drains are in themselves capable of producing the disease, whilst others deny this fact. The more recent researches seem to point out that the people constantly exposed to the lowering influences of drainage effluvia have their vitality reduced to such a low ebb that they are unable to resist the assault of diphtheritic infection, and the co-existence of faulty drains and this disease would seem to be partially, if not entirely, explained.

As has been hinted from time to time in the early part of this paper, the affection of diphtheria would seem to be dependent on the infection of the patient with a definite micro-organism, and this has now been proved to be the case with an almost absolute certainty, though, as a rule, it is not present alone, but is commonly found mixed with other microscopic bodies.

The parasite, described by Klebs and Loeffler, which has been found in diphtheritic membranes and in the affected mucous cavities of patients suffering from the disease, and which has been proved to be in itself capable of producing the affection by its action, is a small, delicate bacillus, varying from 3μ to 4μ in length, and having its ends rounded. It varies slightly in length, three varieties being described—the long, medium, and short—and these variations would seem to be largely due to the media on which the bacillus is grown when kept in a laboratory.

If grown on glycerine-agar, the bacilli, as a rule, have a

tendency to grow to extreme lengths: on blood serum and gelatine they are medium in character, whilst in broth they tend to be stunted in form. This statement as to the length of the organism some of my own work in the Pathological Laboratory of this University would seem to bear out, although it was not found to be invariably correct.

Some of the bacillary rods show swelling at both ends, and others at only one, to which phenomenon the name of "Clubbing" has been given, and they also show a very marked tendency to lie side by side, three or four of them together, in what has been termed "parallel grouping." They are non-motile, and do not form spores, and stain well by Gram's method, and also ordinary aniline dyes.

When stained by Loeffler's alkaline methylene blue they give a very characteristic appearance. The ends of the rods are more deeply stained than the rest of the bacillus, as are also small segments of the body, giving what is known as "Polar Staining," whilst the phenomenon of "Metachromatism" is often marked, both at the poles and also in the rods, appearing as granules of a dark purple colour, contrasting markedly with the ordinary blue colour of the rest of the mass.

Another staining method, which a writer in the *British Medical Journal* states to be absolutely diagnostic in an overwhelming majority of cases, is that of Neisser, in which the polar bodies at the ends of the bacilli are found to take up a deep blue colour, whilst the body of the organism is stained brown if the process is properly carried out.

The growths of the micro-organism on the various media do not present any very marked characteristic for diagnostic purposes, but one point is worthy of note as bearing on the treatment of the disease, and that is, that although in the early stages of its growth on laboratory media the bacillus produces a very slight acid reaction, yet, afterwards, this reaction changes to one of a markedly alkaline nature, and it would seem to be essential for its welfare that this alkaline condition continue. With regard to the value to be attached to a bacteriological examination for diphtheria much may be said, and it is well known that, whilst the discovery of typical diphtheria bacilli proves the presence

of the disease beyond dispute, its absence has little or no weight in proving the absence of the affection. The reason of this statement is threefold.

1st. It is quite possible to swab out a throat, and even to rub over the surface of the membrane, without obtaining any typical bacilli, and, indeed, it has been said that the only certain method of obtaining specimens of the organism, if present, is to raise part of the membrane and swab under it.

2nd. If antiseptic gargles or sprays have been in use it is natural to expect that the bacilli may have been washed away and destroyed by their action.

3rd. As a rule, very mixed growths are obtained from infected throats, and, even in a careful examination, the diphtheria organism may escape notice.

It is also well to remember that a bacillus is in existence, and is frequently found, in perfectly healthy throats, which is not pathogenic, but which, at the same time, presents a most striking similarity to the Klebs-Löffler bacillus. This organism, known as the "pseudo-diphtheritic bacillus," does not, as a rule, show polar staining, and tends to be swollen at the centre, in contradistinction to the Klebs-Löffler organism, whose ends are thicker than the body. It also shows slight cultural distinctions from the Klebs-Löffler bacillus.

Let us now look to the symptoms of the disease.

In common with other infectious diseases, it shows a period of incubation, which lasts, as a rule, "from two to seven days, oftenest two," as Osler puts it.

The initial symptoms are similar to those of an ordinary febrile attack—headache, slight fever, shivering, and perhaps pains in the bones.

Usually the temperature runs up rapidly to 102° or 103° . In a case which came under my own notice, whilst Clinical Clerk in charge of fever wards, convulsions were well marked as an initial symptom in a young child. In pharyngeal diphtheria, which is the most common type, the first symptom noticed by the patient is frequently what has been described to me as "a scraped feeling of the throat on swallowing," and, on examination, the pillars of the fauces

and pharyngeal walls are found to be markedly reddened. After a short time, as a rule about 24 hours, the membrane begins to appear as greyish cream-coloured dots, or patches, on the swollen tonsils, and Osler states that in three days it ought to spread over the tonsils, pillars of the fauces, and perhaps the uvula, which is œdematous as a rule, but in very few cases of those admitted to the wards during my term of office was the growth so rapid, although in one or two it exceeded this in speed of extension.

A marked characteristic of the membrane in diphtheritic cases, and one of diagnostic value, is the tenacious manner in which it adheres to the mucous surface under it, causing bleeding when torn off, and leaving a lacerated surface, which, however, is rapidly covered by new growth.

As a rule, the glands of the neck are swollen and tender, though this symptom is not of necessity always present. In a case of moderate severity the general condition of the patient is not, as a rule, much depressed; the temperature commonly ranges between 102° - 104° , but may on occasions run up to 105° . A point of interest, which has been demonstrated to me, is that frequently the first sign of the formation of a membrane, which may be noted without examination of the throat, is the sudden incidence of a marked difficulty in speaking, amounting in some cases to complete aphonia.

The patient has a tendency to cough, and salivation may be marked, but this coughing would seem to be in a large degree voluntary, and is accompanied by efforts to get up plugs of mucus and membrane. Osler states that, in a case such as described, the membranes should be separated, the throat clear, and convalescence set in in from seven to ten days.

Although many cases, such as described, and which may be called typical diphtheria, are met with, yet one often comes across affections which, although true diphtheria, as the presence of the Klebs-Löffler bacillus proves, yet vary very much from the form described as typical. Of these Koplik gives the following classification:

1. Cases in which there is no local manifestation of a

membrane, but a simple catarrhal angina associated frequently with a croupy cough.

2. Cases in which the tonsils are covered by a pultaceous exudate, not a consistent membrane.

3. Cases presenting a punctate form of membrane, isolated, and usually on the surface of the tonsils.

4. Cases which begin and often run their whole course with the local picture of a typical lacunar tonsillitis. These cases are very doubtful in their course, as they may run a simple, uneventful course, or may, on the other hand, suddenly and rapidly form a membrane which may spread to the nose or pharynx with severe constitutional symptoms.

5. "Latent diphtheria," of which Heubner has described cases which he states to be "usually secondary," occurring in hospital practice chiefly, in young persons, the subject of wasting affections, such as rickets and tuberculosis. There are fever, naso-pharyngeal catarrh and gastro-intestinal disturbances. Diphtheria may not be suspected until severe laryngeal complications develop, or the condition may not be determined until the autopsy. Of this last type I unfortunately have never had the opportunity of seeing a case.

As may very well be believed, in a case of pharyngeal diphtheria it is common to find Klebs-Löffler bacilli on the nasal mucous membranes and in the discharges therefrom, and it would appear possible for them to produce two affections in this region, which, although they present similar appearances on superficial examination, nevertheless differ largely in their general features. We may have a case in which the nasal cavity contains thick membranes, and yet there are no other constitutional symptoms, or we may find a case which presents similar appearances, but in which most acute and malignant symptoms may develop. It is also possible to have a primary nasal diphtheria.

We now come to the most interesting form of diphtheria, "laryngeal diphtheria," which for a long time was confounded with what is now known to be a different disease—laryngismus stridulus. Indeed, it is still often known as "membranous croup."

The symptoms of both diseases are very similar. The

patient, usually a child, feels out of sorts and has a cough, usually for a day or two before anything of importance is noted, then suddenly the attack comes on with intensity. The cough becomes hard and "brassy" in character, respiration is impeded, at first only inspiration, but after a while expiration as well, and the voice is reduced to a whisper. With every inspiration the ribs and lower intercostal spaces are sucked in, the patient, as a rule, becomes livid, the temperature rarely rises much, but the pulse becomes very rapid, probably on account of the violent efforts at respiration. In favourable cases the paroxysm passes off, the child goes to sleep, and in the morning wakes up feeling fairly comfortable, but, as a rule, slightly weakened. In grave cases, however, the lividity increases, exhaustion becomes excessive, and the patient dies from CO_2 poisoning.

It is almost impossible to differentiate this type of diphtheria from croup until a culture can be made from the throat.

Concerning diphtheria of other parts than those described, we may find the conjunctiva affected: and a case came under my notice in which, taking the tonsils as its starting point, the membrane grew along the soft palate and uvula and along the pharyngeal walls, thence into the nose, up the left nasal duct, and finally into the eye, where it set up conjunctivitis, followed by panophthalmitis.

The external auditory meatus is also sometimes attacked, and otitis media, with perforation of the ear-drum, is also sometimes found. Diphtheria of the skin about the mouth, anus and genitals is also sometimes seen, but of this I can say nothing, as a case has not yet crossed my path.

The complications of diphtheria are many, the most important being those affecting the lungs, heart, and kidneys.

In nearly all fatal cases of diphtheria capillary bronchitis with pneumonia is found, and, in some cases, septic pneumonia, collapse and gangrene of the lung are met with. The affected throat may ulcerate, and, in some cases, become gangrenous.

With regard to cardiac complications, bradycardia and tachycardia may be found, but heart failure arising from

acute dilatation or cardiac paralysis may occur either in the height of the disease or as a sequela. Heart symptoms come on, as a rule, very suddenly, and it would be hard to believe, unless one had seen it, that dilatation could occur in such a short space of time.

In a case which came under my notice a child of three, well advanced in her convalescence, had been allowed to get up for a short time, and to play with her toys on the floor of the ward. Her heart, in the usual routine of the hospital, had been examined about 10 a.m., and found normal. At 2 p.m. she became weak, nearly lost consciousness, and her heart was found to be dilated to beyond the nipple line.

Albuminuria is also a serious complication of diphtheria. It occurs in two forms—Firstly, as ordinary febrile albuminuria, and secondly, as parenchymatous nephritis, with very large quantities of albumin, blood, and casts in the urine. In this last form it is most serious, and frequently becomes permanent.

The last and most important sequela is paralysis. It is a toxic neuritis, and can be produced by injecting the toxin obtained from the Klebs-Löffler bacillus into animals.

Any muscles can be attacked, but most commonly the soft palate is the first part of the body which is noticed to be affected, as, by its failure to act, the voice becomes nasal in character, and food regurgitates through the nose. Deglutition may be also embarrassed owing to paralysis of the pharyngeal constrictor muscles. Facial paralysis and paralysis of the extrinsic and intrinsic muscles of the eyes have been noticed. This paralyzing effect is sometimes the cause of death when it attacks muscles whose action is essential to life, such as the heart, intercostal muscles, or diaphragm. In fact, one of my own cases, a child of nine years old, who had so far recovered that she was about to leave hospital the next day, was found dead by the nurse, who had left the ward a few minutes before to carry in the patients' dinners. Death was supposed to have been caused by diaphragmatic paralysis, as no other lesion could be found to account for it.

Up to this stage, although frequent reference has been made to the membrane found on the affected surfaces, and

which is one of the characteristics of the disease, nothing has been said as to the nature of this structure.

Many authorities say that it is necessary that there should be some superficial lesion of continuity in the mucous membrane in order that the bacilli may have some basis from which to start their injurious process of work.

Whether this is the case or not is still a matter of controversy. But, supposing the organisms to have obtained a foothold, the first process to be started by the toxin they produce is a necrosis of the superficial epithelium with which it comes in contact, the deep cells of the mucosa being afterwards affected. The second step is the result of the inflammation set up by the first process, and consists in an emigration of leucocytes, which eventually, in company with the dead epithelial cells, undergo a hyaline transformation. This hyaline transformation has been termed by Weigert "coagulation-necrosis," and is accompanied by a fibrinous exudate derived from the neighbouring tissues, which, in a measure, has a localising effect on the action of the poison and prevents its spread to deeper layers. With regard to the treatment of diphtheria, it may be said that there are as many methods as there are practitioners. They may all, however, be divided into three divisions—1. Hygienic; 2. Local; 3. General.

Hygienic measures should be carried out as follows:—The patient should be isolated from the rest of his family in a well-lighted, airy room, from which everything, except such articles as are absolutely necessary for his comfort, has been removed. The air should be kept at an even temperature of about 68°, and also should be kept moist by means of a steam kettle.

The local measures to be adopted are those directed to the removal and destruction of the membrane, and also to the disinfecting of the mouth, throat, and surrounding cavities.

The membrane may be removed by actual force gently applied, and by irrigating and swabbing with antiseptic lotions, which would appear to be most efficacious when applied in an alkaline condition, owing to the fact that mucus is dissolved by solutions of this nature. To render

the throat aseptic we must act in no half-hearted way, but use the strongest antiseptic that can with safety be applied, by means of a spray or on a swab of wool bound to the end of a stick—perchloride of mercury in aqueous solution, up to a strength of even 1 in 500, having been used with marked success. Swabbing or spraying should be done three or four times each day. It is well also to be mindful of the fact that the Klebs-Löffler bacillus is retarded in its growth by acid being present in its neighbourhood, hence the following plan may be tried:—Irrigate out the cavities with alkaline antiseptic lotions in order to soften the mucous constituents of the membrane (*e.g.*, glyc. acid. carb., ʒvi.; sod. bicarb., ʒii.; aquæ. ad ʒvi.) and endeavour by gentle manipulation to remove parts of the membrane, and immediately after this apply strong perchloride of mercury on a swab.

Burney Yeo advises that a spray, similar in composition to that of the alkaline antiseptic lotion mentioned above, be constantly kept playing in front of the patient from a steam kettle.

With regard to general remedies, the great consensus of opinion seems to be in favour of perchloride of iron. For a child of three years old the following mixture seemed beneficial:—

R. Tinct. ferr. perchlor.	-	-	m v.
Potassii chloratis	-	-	gr. ii.
Syrupi	-	-	m xx.
Aquæ	-	-	ʒ ss.
Ft. mist.	M.		

Every three hours.

Benzoate of sodium has also been advised by many authorities, but I have never seen it have any very marked effect.

Cardiac symptoms must be met by suitable treatment. A mixture containing digitalis and caffein seemed to give excellent results in cases under my own observation, but in children caffein alone in two grain doses in a tablespoonful of port wine worked well, if given frequently. Nephritic symptoms must be treated by the usual remedies, and the lungs must be also carefully watched, and, if necessary, attended to.

With regard to intubation and tracheotomy, in cases where suffocation is imminent no time should be lost, but a point has been demonstrated to me, by a practitioner of large experience in such cases, which is of some interest, as it may help us in our prognosis as to the result of the operation. He stated that if, on inspection before operation, the lower ribs and intercostal spaces were sucked in by the effort at inspiration we might hope for success, but if, on the inspiratory effort being made, no matter how strong it might seem, no such phenomenon was observed, the hopes of a successful result of operation were very slight.

The introduction of the antitoxin treatment of this disease has reduced its nature from being one of the most virulent character to one of comparative innocence. Issued, as this substance is, in small bottles ready for use, and sent out in quantities suitable for immediate injection, and as the operation needed is so simple and fraught with so little danger or discomfort to the patient, it would seem a pity that all cases, which have even a suspicion of diphtheria about them, should not be inoculated with a suitable dose as a matter of routine.

But it might be well at this point to sound a note of warning.

Two infants were admitted who had been inoculated previous to their entrance by the physician in their neighbourhood, and both died of gangrene of the lower lobe of the right lung as a result of the needle penetrating from the lumbar region into the thorax. This may seem incredible, but when one considers the thinness of a small infant's parietes, and the fact that the child probably jerked about during the injection, we may, perhaps, be more careful than we otherwise might be when injecting antitoxin into the lumbar region of a child.

Holt gives the following directions for the use of antitoxin:—"For children over two years old the initial dose should be from 1,500-2,000 units, in all severe cases. . . . This dose should be repeated if necessary in 24 hours if no improvement is seen, and again in 24 hours if the course of the disease is unfavourable. Exceptional cases of great

severity, especially when seen late, should receive somewhat larger doses than those mentioned—*i.e.*, 3,000 units.

One-tenth cc. of what Behring calls his normal serum will counteract ten times the minimum dose of diphtheria poison fatal for a guinea-pig weighing 300 grammes. One cc. of this normal serum is called "an antitoxin unit."

ART. XIV.—*Case of Primary Cancer of Liver in Girl aged twenty-one.*^a By W. J. THOMPSON, M.D., Dubl., F.R.C.P.I.; Physician to Jervis-street Hospital.

CANCER of the liver is not by any means an uncommon disease, but primary, or secondary, cancer of the liver at the age of twenty-one years is rarely ever met with, and so we considered this case of sufficient interest to bring before the Pathological Section. Murchison, in his historic record of cases, mentions only two of primary cancer—one aged forty-two and the other aged fifty. He also records a case in a patient, aged twenty-four, who had well-marked pyrexia, but at the autopsy there was a cancerous mass found in the neighbourhood of the left kidney which extended down along the vessels to the testicle. He states that when cancer first commences in the liver, other parts, notably the mediastinal, inguinal and cervical glands and the lungs are apt to become secondarily affected. Coming to more recent times, Dr. Hale White, in the chapter on "Tumours of the Liver," in Professor Allbutt's "System of Medicine," deals with statistics relative to cancer of the liver very fully. He states that at Guy's Hospital during the nine years 1885 to 1893, out of about 4,200 *post-mortems* secondary cancer of the liver was found in 136 cases, 126 of which were carcinomatous. He further states that during twenty-four years, from 1870 to 1893, out of about 11,500 *post-mortems* made at the same hospital, only eleven cases of primary cancer were discovered, or about 10 per cent. The proportion of primary to secondary cancer is about one to twenty-five. The age of the youngest case recorded was twenty-three. He also states that out of

^a Read before the Section of Pathology in the Royal Academy of Medicine in Ireland, on Friday, February 27, 1903. [For the discussion on this paper see page 306.]

seven cases recorded in the Pathological Society of London during a period of twenty sessions, the youngest case reported was thirty-three years. He makes a remarkably interesting statement when he said that in none of the recorded cases of primary cancer was there any family history of the disease, also that the greater number of cases occurred in men.

CASE.—Mary R., aged twenty-one, was admitted to Jervis-street Hospital on October 31st, 1902. Her family history, which was reliable, was good, none of her people having died from cancer or tuberculous disease, nor was there any history of lunacy in the family. She had always been strong and healthy, and until admission was employed in a bottling store in a distillery. About four months previous to this she first commenced to complain of gastric disturbance, uncomfortable feeling after food, vague epigastric pains, vomiting, and on one or two occasions she stated she vomited blood. Her stomach trouble becoming worse, and feeling unable to follow her occupation—in which she had a good deal of stooping and leaning forward to do—she was sent into hospital as a case of probable gastric ulcer.

On admission the liver was found to be uniformly enlarged, smooth on the surface, no pain on deep pressure. It extended about one inch below the costal cartilage and almost filled the epigastric region. The abdomen was not distended, nor could any hard nodules or tenderness or fluid be detected in it. The patient could not point to any localised painful spot in the region of the stomach. The tongue was coated; pulse, heart sounds, and temperature normal. The amount of urine secreted each day averaged forty ounces. It was normal in colour, free from albumin or sugar, but contained urates. The uterine functions were normal. The bowels were not constipated, and the motions did not show any liver disturbances. Professor McWeeney examined the blood and found it practically normal, with very slight polynuclear leucocytosis. It was quite evident the gastric disturbance was due to pressure, and this remained her most distressing symptom all through her illness.

After admission the liver enlarged rapidly, but remained free from pain. She complained of a dragging sensation in her right side. She was unable to take and retain nourishment, and she lost flesh rapidly. Six weeks after admission ascites appeared, and a couple of weeks after this slight jaundice supervened, which,

however, never became well marked. Except for the weight and pressure of the enormously enlarged liver she never complained of actual pain in the liver, nor could it be detected on pressure. About the same time the ascites appeared slight nodules could first be felt, and these in a short time were well marked. Before death, which occurred on January 18th, 1903, the liver extended as far down as the umbilicus, and when removed from the body weighed 197 ounces. The temperature remained normal until ten days before death, when it fluctuated very much, sometimes going up as high as 103 degrees. Her illness lasted altogether about seven months. At the autopsy the abdomen was filled with dark-coloured fluid; there were no enlarged glands; the lungs, kidneys, and spleen appeared normal; the ovaries were slightly enlarged, the left one more so than the right. I greatly regret they were not kept for Professor McWeeney, as I had intended.

Looking at the case from a clinical standpoint, the prominent interesting facts are:—(1) Age of patient; (2) absence of any family history; (3) painless character of the enlarged liver; (4) lateness at which the ascites, the nodules, and the jaundice appeared.

ART. XV.—*A Case of Splenic Anæmia.*^a By GEORGE PEACOCKE, M.D., F.R.C.P.I.; Assistant Physician, Adelaide Hospital, Dublin.

"*ANÆMIA SPLENICA* is a disease characterised by a progressive oligæmia arising without appreciable cause, which gives rise to grave disturbances of all the organic functions—to œdemas, hæmorrhages, irregular fever; followed constantly by death; accompanied by notable tumefaction of the spleen and also of the liver, a tumefaction independent of any preceding morbid condition and not associated with any leucæmic alteration of the blood." Such is the definition of the disease as given by Banti in the year 1882, to whom is due the credit of having first given to the profession any complete account of the affection. Prior to his article, isolated cases had been described by Woillez as far back as 1856, and by Collin, Wunderlich and Griesinger, Mueller, Landouzy, Pye-Smith, and Strümpell,

^aRead before the Section of Medicine in the Royal Academy of Medicine in Ireland, on Friday, March 13, 1903.

but they had received little recognition. More recently Bruhl has written an exhaustive account of the disease in the *Archives générales de Médecine* for 1891, under the title "Splénomégalie Primitive," including in his article the history of fourteen cases, and "A Critical Summary of the Literature on Splenic Pseudo-Leukæmia" appears in the *American Journal of Medical Science* for 1899 from the pen of Sippy.

The disease now finds a place in all text-books of medicine, but as yet the total number of recorded cases is small; according to Dr. West, it probably does not exceed thirty. The notes of the following case may therefore be of interest :—

On June 8th, 1902, a man, aged forty-five years, was admitted into the Adelaide Hospital under my care. He lived near Tralee, in Co. Kerry, and was by occupation a farmer. His family history revealed nothing of importance, and until the commencement of his present trouble he had been a perfectly healthy man, with the one exception that about thirty years ago he suffered from an attack of typhus fever.

The history of his illness is very brief. He does not remember when he first felt any symptoms, but thinks that for the six months previous to admission to hospital he had been gradually getting weaker, less able for his work about the farm, easily made breathless by exertion. He also felt what he described as a "gurgling pain" in the left side, and at intervals had rather sharp paroxysmal pain in the same side. He further noticed that his trousers round the waist were becoming tighter, and that, while given plenty of room for expansion by the local tailor, he had recently to keep one or two of the top buttons undone. So little did his symptoms trouble him that it was not until about three weeks before admission that he consulted a doctor. He had a more severe attack of pain in the side than previously, and his wife insisted on his obtaining medical advice. When examined a tumour was felt in the abdomen, and he was advised to come up to Dublin without delay. His appearance when I saw him was not suggestive of any serious mischief. He was a well-nourished man; the skin of his face, bronzed by constant exposure, perhaps hid the anæmia which was present. His pulse was regular, good volume, 84 per minute; temperature normal; heart sounds healthy; lungs normal. On examining the abdomen a large prominent tumour was seen occupying almost the entire left side of the abdomen.

On palpation it was smooth on the surface, but a distinct friction rub could be felt; the lower end was rounded, and extended to within two fingers' breadth of the crest of the ilium; the upper end was lost under the costal arch; a distinct notch was palpable on the anterior edge, close to the umbilicus. The tumour did not move on respiration, nor was it tender to the touch. It was uniformly dull on percussion over the tumour. The friction rub so easily felt was very distinct on auscultation. The urine was acid, sp. gr. 1024, and contained a trace of albumen.

Concluding that the tumour was the spleen, no accurate diagnosis was possible until a blood count was made, so accordingly on the 11th of June, with the assistance of Prof. J. Alfred Scott, the blood was examined. The following was the result:—Red blood corpuscles, 4,250,000 per cb. mm.: hæmoglobin, 60 per cent.; leucocytes, 1 in 1,000. The more exact examination of the leucocytes showed:—Eosinophils, 4 per cent.; polymorphonuclear leucocytes, 39 per cent.; mononuclear leucocytes, 4 per cent.; lymphocytes, 53 per cent. The leucocytes were rather fewer than normal, but there was a distinct relative increase of lymphocytes; otherwise the blood conformed to the chlorotic type. The case was evidently not one of splenic leucocythæmia.

The absence of wasting and of secondary growths elsewhere was against malignant disease of the spleen. The patient had never been in a malarious country. There was no evidence of tuberculosis, nor were there any symptoms or signs suggestive of cirrhosis of the liver. There was no history of syphilis.

I, therefore, came to the conclusion that the case was one of splenic anæmia.

In Clifford Allbutt's "*System of Medicine*" the symptoms of this disease are given by Dr. West. He divides it into three stages:—

The initial stage, in which the symptoms are those of extreme anæmia, with great loss of muscular power, and some wasting of muscle, though usually without emaciation.

The second stage is characterised by progressive enlargement of the spleen, and by attacks of severe pain in the splenic region; the anæmia is more profound, the loss of strength is extreme, and the patients are liable to repeated attacks of bleeding, especially from the nose; the temperature is raised, and of a hectic character.

In the last stage the condition is one of progressive asthenia, which ends in death; there is in it nothing especially characteristic.

The affection occurs much more frequently in men than women, in the proportion of 4 to 1, and is a disease of adult life. The blood usually displays the character of that found in chlorosis, but as the disease advances the reduction in red cells becomes more pronounced. Perisplenitis is fairly constant, often giving rise to considerable pain and tenderness. Dr. Bruhl says: "It is the painful crisis which is the first symptom which causes unrest. It is that which shows the commencement of the malady."

The liver is not infrequently somewhat enlarged.

Vomiting, nausea, constipation or diarrhœa have all been noticed. The tendency to bleeding is pronounced; the hæmorrhages are rarely profuse and more of the nature of oozing.

Epistaxis is very frequent and usually one of the earliest symptoms.

The temperature is often elevated and of a hectic type, but Bruhl says that fever is unusual.

The nervous system yields to special symptoms; urinary changes are indefinite; sometimes albumen is present in small amount.

The circulatory system presents only such changes as are common to all forms of anæmia.

The one important and apparently almost constant symptom which was absent in the present case was the tendency to hæmorrhage; the patient gave no history of any bleedings, and he had certainly none while in hospital.

The progress of the case during the first fortnight in hospital was not reassuring. I tried arsenic in increasing doses, as the only drug at all likely to be of service, but with no good result. The patient was becoming less able for exertion of any kind, partly from increasing breathlessness, and partly from the discomfort caused by the weight of the abdominal tumour. He also suffered considerably from pain in the side, and was perceptibly getting weaker. A blood count made on the 23rd of June showed that the red cells had further reduced to 3,500,000 per

eb. mm., and the hæmoglobin to 50 per cent. The white cells were unaltered. I therefore decided to delay no longer, and asked Mr. Gordon to undertake the removal of the spleen. This he successfully accomplished, and though an account of the operation does not properly belong to this Section of the Academy, I thought it would render the communication more complete to incorporate a brief summary of it as furnished to me by Mr. Gordon :—

" On June 27th. 1902, I opened this patient's abdomen by a long incision through the left rectus muscle. I found the enormous spleen free from adhesion on its outer surface, and the few omental attachments at the lower end were easily separated.

" The division of the splenic ligaments proved both difficult and dangerous. There was nothing of the nature of a pedicle, for the peritoneal reflection at the hilum measured fully six inches vertically. The real difficulty, however, was due, not to this, but to the fact that I could not turn over the spleen towards the right in order to bring into view the lieno-renal ligament with the splenic vessels which lie in it. This was owing to the presence of posterior adhesions and to the great bulk of the spleen itself. It was then necessary to pass the needle from in front, and, unfortunately, in doing so I injured the splenic vein. The resulting hæmorrhage was appalling, and had not Mr. Heuston, who was assisting me, very promptly compressed the vessels, the patient would have died. This compression Mr. Heuston maintained until I had divided the remaining attachments between clamps and removed the spleen. I passed separate ligatures round each clamp, and a silk ligature including all.

" There remained some bleeding points higher up in the under surface of the diaphragm. Time was a matter of much importance, for the patient was much collapsed; I thought it, therefore, best to pack the cavity with gauze and close the greater part of the abdominal wound as quickly as possible. I should add that I introduced a large drainage tube through a stab puncture in the loin.

" I think I have told all of importance relative to the operation, and the after-history does not require detailed description. The gauze plugs were a source of some anxiety. I began by removing them very gradually—one or two strands each day—but in the end I was obliged to get on more rapidly, as suppuration had occurred about them. The patient left hospital on August 16th, and on August 24th he took a walk of ten miles."

On the 12th of July, a fortnight after operation, a fresh blood count was made. The red cells were 3,750,000 per cb. mm., hæmoglobin 62 per cent., and white cells 6,300 per cb. mm., or 1 in 600. A month later the red cells numbered 4,400,000, the hæmoglobin 75 per cent., and the white cells were practically unaltered. After a stay of three weeks at our Convalescent Home, he returned to Kerry in apparently perfect health, a slight discharge still coming from a small sinus in the wound.

On the 13th of September I received a letter from him, in which he says: "I felt no inconvenience or fatigue whatever from the journey to Kerry; and since I came home I have been constantly walking about or standing, and notwithstanding this, I feel much better in health (mentally and bodily) than I have felt for years. I am maintaining the good appetite I had in hospital, am a sound sleeper, and I am, I believe, gaining in flesh rapidly—so much so that my friends tell me they had not seen me look so well for a long time."

I did not hear from him again until the 22nd December, when, in answer to a letter of mine asking him to come up to Dublin to let me examine him, he wrote—"Since I left the hospital I cannot say I have had an hour's sickness. I am up every morning at 6 o'clock, and do all the knocking about and marketing of the farm as well as ever I did. I am ploughing lea land for the last nine or ten days, and don't find it doing me any harm. The discharge is now stopped nearly a month, and I have also increased in weight over one and a half stone since I came home."

On January 10th, 1903, he came up to town, and on the following morning I examined him and found him in perfect health; his weight had increased two stone. Professor Scott kindly made an examination of the blood, which showed:—Red cells, 4,400,000 per cb. mm.; hæmoglobin, 85 per cent.; white cells, 6,600 per cb. mm. There were a few nucleated red blood corpuscles, normoblasts. The differential count of the white cells revealed—polymorphonuclear leucocytes, 61 per cent.; mononuclear leucocytes, 6 per cent.; lymphocytes, 21 per cent.; eosinophils, 12 per cent.

It will be noted that, whereas before operation there was a considerable relative increase of lymphocytes, this count, taken six months after removal of the spleen, shows a relative increase of eosinophils. The lymphocytes differed from those

usually found in normal blood, the proportion of cell body surrounding the nucleus being apparently much increased. The presence of normoblasts was also a new feature.

It only remains for me to mention the pathological appearance presented by the spleen after its removal, and for the following account I am indebted to Professor Scott, who kindly undertook the examination :—

“The spleen when removed showed a general enlargement preserving much the same shape as when normal. When laid on a table on the convex side, it became very slightly flattened, and measured 12 inches long by 8 inches wide, and 4 inches at its thickest part : it weighed 8 lbs. 2oz. The capsule was very considerably thickened in a few places over the surface. In the other parts it did not appear to the naked eye to be abnormal. Section showed it internally to be fairly firm, and much paler than normal. Some dark marks or lines, which gave a marbled surface to the section, was all that could be seen of the spleen pulp. The light masses were round, almost regularly one millimetre in diameter, and covered the whole surface between the lines of the spleen pulp, and to the naked eye, or with a pocket lens, appeared to be Malpighian corpuscles.

“Microscopical examination showed that the Malpighian corpuscles were enlarged until they touched. The spleen pulp was absent ; special stains showed a number of red blood corpuscles at the junction of and slightly into the diffuse edge of the Malpighian corpuscle, this being the cause of the dark line visible to the naked eye. Careful examination showed that there was no increase of the trabecular or the reticular connective tissue, the only connective tissue increase being found in the patches of old perisplenitis. The general appearance suggested lymphadenoma rather than any other cause of splenic enlargement.”

In reviewing the literature of the subject, it is at once apparent that under the term splenic anæmia are included more than one distinct affection. The confusion is probably due to the fact that a combination of anæmia with splenic enlargement is by no means infrequent.

The term has been applied to the cases which occur in infancy and early childhood, and which, in nearly all instances, are associated with either rickets or syphilis. It has been used

to describe the condition that supervenes as the result of malarial infection. It is used synonymously with the term splenomegaly, a disease in which the enlarged spleen is firm in texture, and shows microscopically a great overgrowth of the trabecular framework at the expense of the lymphoid tissue and Malpighian bodies—a disease which appears to be rather a primary affection of the spleen than a primary blood disease, and yet one which in its clinical symptoms very closely resembles the case I have brought under your notice this evening.

In my case, however, the pathological changes found in the spleen are totally different, suggesting, as Professor Scott says, a lymphadenoma rather than any other cause of splenic enlargement, and when we compare the changes found in the blood with those usually found in lymphadenoma, or Hodgkin's disease, the resemblance is very striking.

In both there is a diminution of red cells, with low colour index, or blood of a chlorotic type. In both the white cells, if not actually diminished in number, are not more than normal, and in both there is a marked relative increase of lymphocytes.

For want of a better name I have entitled my paper "A Case of Splenic Anæmia." A more accurate title would, perhaps, have been "A Splenic Form of Hodgkin's Disease."

ART. XVI.—*A Case of unusually Severe Measles in an Adult : Second Attack.*^a By DR. J. J. BURGESS.

EPIDEMICS of measles are so frequent in their occurrence in this city, and their course, except in the extreme poor, so generally benign, that I have for a long time considered them as sinecures to the physician in attendance, merely requiring of him to see that his patients are isolated, kept warm, fed on a liquid diet, and dosed with a so-called diaphoretic mixture. I am aware we are sometimes brought in contact with desperate cases of broncho-pneumonia in our patients suffering from this disease, more frequently in some epidemics than others, despite, too, all our efforts [at

^a Read before the Section of Medicine in the Royal Academy of Medicine in Ireland, on Friday, March 13, 1903.

prophylaxis. Yet when we consider the large number of cases which pass through our hands without any such untoward complication, I feel we must be led to regard its occurrence as exceptional. That it is a long lane which has no turning is exemplified by the following case, which I venture to think is worthy of being recorded by the exceptional features it presented :—

A married lady, aged thirty, nursed her eldest child through a somewhat sharper attack of measles than the ordinary. During the latter part of this time her second child, which had been isolated, sickened, and finally developed the same disease.

On the 5th November, the ninth day after the appearance of the rash on the first child, the mother felt very unwell with severe frontal headache, pain in the back and limbs, and great difficulty in swallowing from a sore throat. She told me that two days before, while going about exposed to the draughts of the house, a rash had come out on her chest, but disappeared the same day, and that she had a severe attack of measles years ago, when she was at school. On examination her temperature was 102·5° F., her pulse rapid, her palate presented no Koplik's spots; there was diffuse redness commencing at the anterior pillars of the fauces, extending over the entire soft palate; both tonsils were swollen and ulcerated on the inside. There was constant vomiting, irrespective of any food taken, some dry cough, great restlessness, and complete loss of sleep. No photophobia or conjunctivitis present. She was at this time menstruating.

Her condition was practically the same until the 7th inst., when, on my morning visit, I found the rash of measles faintly marked at the angles of her mouth. Her temperature in the afternoon rose to 104°. The vomiting, restlessness, and insomnia were continued, uninfluenced by the treatment adopted, the kidneys and bowels acting normally.

The rash came out very slowly; its colour, especially on the extremities, was that of mahogany. The face was livid, with considerable œdema of the areolar tissue, seeming twice its normal size. The conjunctivæ were intensely infected, giving the eyeball the appearance as if a hæmorrhage into the sub-conjunctival spaces had taken place. The rash did not extend to the lower extremities until the third day of its appearance. The prominent symptoms at the time were the high temperature, the insomnia,

a hard cough which caused great distress, and the frequent vomiting, not even iced water being retained.

On the 9th inst. (the third day of the rash) I had the benefit of Sir Francis Cruise's opinion, who joined me in the further treatment of the patient. He at once pronounced the case as one of very severe measles.

The next day (fourth day of the rash) there was suppression of urine, none having been passed during the night, and the bladder was found empty on the passage of a catheter. A diuretic mixture of nitrate of potassium being administered, the renal function was established during the day, and the temperature appeared to be falling.

The following morning the temperature at 8 a.m. had fallen to 100°; but when Sir Francis Cruise and I saw the patient at 12 it had risen to 103°, and again suppression of urine was present. We dry-cupped over the loins: the resulting discoloration of the skin was deep brown in colour. We continued the nitrate of potassium mixture with the addition of infusion of digitalis. As I did not like the symptoms I returned at 4 in the afternoon. I was told the kidneys had acted, and was shown about half a pint of smoky-looking urine in a vessel. Instead of finding her better, as I expected from the above, her temperature was now almost 106°, pulse galloping, and she was in a condition of stupor. Seeing there was no time to be lost, and fearing an uræmic convulsion at any moment, I rapidly, with the assistance of the nurses, wrung out a blanket which had been steeped in almost boiling water, took her clothing off, wrapped her up in the hot pack and placed several dry blankets around her. This done, I prepared a hypodermic injection of pilocarpin, but gave the pack twenty minutes, to see if it would act before administering it. Before that time had elapsed I was joined by Sir John Moore, who came in Sir Francis Cruise's absence. On examination we found the skin perspiring freely, and decided at present not to give the pilocarpin. She was put on 15 gr. doses of benzoate of sodium in hot water and, strange to say, this rather nauseous dose was the first for many days which the stomach retained. Four hours later the temperature was 103°, the skin freely acting, so we removed the pack and wrapped her up in warm blankets.

Next day we again found there was suppression of urine, none having been passed since the previous afternoon: this, however, gave way at noon, and was the last of this dangerous com-

plication we were to see in our patient. The temperature at night still kept up, presenting a pyrexial condition, which I am sure many here besides myself have seen following even mild cases of measles. The pulse took somewhat longer than the temperature to return to 72, her normal rate: but finally, convalescence being established, she grew rapidly well, and, except for some muscular weakness of her legs, presented no sign to indicate what a fight she made for her life.

This case I consider somewhat peculiar for the following:—

1. The prevalence of scarlatina symptoms in the course of a case of measles, although the rash as it came out was undoubtedly measly, yet the inflamed throat, ulcerated tonsils, the continued vomiting, the kidney phenomena, and, later on, the coarse desquamation would collectively make me doubt my own diagnosis were it not corroborated by physicians of such experience as Sir Francis Cruise and Sir John Moore. I may here mention parenthetically the same symptom of vomiting throughout the attack was also present in the cases of both children, in whom the other appearances left no doubt whatever of the nature of the disease. This symptom persistently occurring during an attack of measles I have never seen before, nor can I find any reference to it in the text-books.

2. The rash came out very slowly, and did not extend to the feet until the third day. Its character was petechial: as I mentioned before, its colour was deep brown.

3. The renal complication, which is most rare in measles. According to Professor Nothnagel's book only two cases are recorded by Henoch. The urine after the period of suppression was for a long time scanty, not exceeding 30 ozs. in the 24 hours: was smoky, contained phosphates; at a later date abundant urates; but at no time could we find albumen. That which was voided immediately after the suppression contained 10 gr. solids to 1 oz.

4. The rapid cardiac action, without pulmonary complications, pointed to the toxic forms of measles alluded to by Allechin.

5. The spasmodic cough, resembling pertussis, which followed the acute stage, and persisted during convalescence—a constant feature in my experience in the last epidemic.

6. The continual insomnia and restlessness, over which none of the drugs employed seemed to have the very slightest power. The following were tried, singly and combined :—Opium before the renal symptoms occurred, chloral-sulphonal, the bromides.

7. The high range of temperature culminating in hyperpyrexia, terminating by protracted lysis. The latter is a condition found frequently associated with measles.

In the treatment two things appeared to do good—the internal administration of benzoate of sodium, which stimulated the renal function ; and probably the hot pack, which warded off uræmia and cardiac failure from the high temperature.

CONGENITAL VARIOLA.

It is a well-established fact that a pregnant woman attacked by variola may transmit the disease to the fœtus. In many cases the infant escapes the contagion, and presents after birth a remarkable immunity against inoculation. Besides these cases, there are others where the infant is attacked by variola before birth, and comes into the world with cicatrices or a well-marked eruption upon it, or the eruption may develop itself a short time after birth. It is also possible for the fœtus to be infected without the mother contracting the disease. In M. Jaconnet's case the woman, aged twenty-six, had been vaccinated at birth, but never re-vaccinated. She was confined on the third day of her illness, and before the ordinary papular eruption had appeared. The attack was a mild one. The infant was born at full term, and was not vaccinated. Eight days after its birth the child presented some redness, which had spread to the whole body by the following day. The child was admitted to hospital on the thirteenth day after its birth, and had then a confluent vesicular eruption on the face and a very extensive papular eruption on the body and limbs. She died three days later from a confluent attack of variola. If three days are allowed for the period of invasion, the attack of variola began five days after birth, and death occurred on the twelfth day of disease ; the infection of the fœtus and a part of the period of incubation was passed *in utero*. The case is an unusual one, and it is interesting to note that the attack of variola, which was benign in the mother, was transmitted to the child with such an intensity that it died from a generalised confluent attack.—*L'Écho Médical du Nord*, Dec., 1902 ; and *Treatment*, Jan., 1903.

PART II.

REVIEWS AND BIBLIOGRAPHICAL NOTICES.

Elements of Pharmacy, Materia Medica, and Therapeutics.

By WILLIAM WHITLA, M.A., M.D., Professor of Materia Medica and Therapeutics in Queen's College, Belfast; Senior Physician to, and Lecturer on Clinical Medicine, Royal Victoria Hospital; Consulting Physician to the Ulster Hospital for Women and Children; Consulting Physician to the Belfast Ophthalmic Hospital; Examiner in Materia Medica, Royal University, Ireland; &c., &c. With Woodcuts. Eighth Edition. London: Henry Renshaw. 1903. 8vo. Pp. 637.

DEDICATED to Sir William Thomson, C.B., M.D., Ex-President of the Royal College of Surgeons in Ireland, "in recognition of his many services to the Medical Profession at home, and to the Empire in South Africa," this eighth edition of Sir William Whitla's most popular text-book bespeaks a cordial welcome at our hands.

The seventh edition was out of print for nearly a year—we forecast that this edition will soon be exhausted also. A great deal of the volume has been re-written; all of it has been carefully revised and brought well up-to-date.

By increasing the size of the page, and using a larger and clearer type, the work now forms a companion volume to the author's well-known "Dictionary of Treatment."

The section of the present edition which has been most enlarged and developed is Part V. on "Non-official Remedies." In it will be found all the new remedies which have established their reputation, and a few which have not done so. Some of the drugs included in this list are now quasi-official, as they appear in the Indian and Colonial Addendum to the British Pharmacopœia (Government of India Edition, 1901). We are glad to find the author speaking favourably of "aspirin," or salicylo-acetic acid as an anti-rheumatic and anti-neuralgic. The chief advantage it has over the salicylates is that it is.

more slowly eliminated by the synovial membrane. It passes through the stomach unchanged, and is absorbed in the small intestine. Georges has recently reported as to its value in chorea, and in 10 or 15 grain doses it has proved of use in acute rheumatism in our own hands.

An "Index of Poisons and their Antidotes," reprinted from the author's "Dictionary of Treatment," brings this excellent work to a close.

The Mycology of the Mouth : a Text-book of Oral Bacteria. By K. W. GOADBY, D.P.H. Camb. ; M.R.C.S., L.D.S. Eng., &c. London : Longmans, Green & Co. 1903.

THERE is, perhaps, no better proof of that advancement which the profession of dentistry has made within recent years than the appearance from time to time of works, unquestionably valuable, scientific, and reliable, bearing upon one or other of its many sides. Of such we have reviewed, within these pages, not a few during the past year, worthy, each of them, to find a place in the modern practitioner's library, and under this category must, we think, come the present manual. The author—himself an acting dentist—has given us a handbook upon the micro-organisms of the mouth, full, comprehensive, and detailed, their life histories, various forms, means of distinguishing, rearing, and cultivating, all being fully gone into. This work has evidently also been written as a practical guide to the student of the subject, for many pages have been devoted to the description of methods, apparatus, formulæ, &c., used in the pursuit of bacteriological investigation, while these, with the numerous minute organisms themselves, are the more readily appreciated by means of the many beautifully reproduced photographs and cuts inserted throughout the 200 odd pages constituting the book.

In addition to the special oral bacteria, numerous other forms, occasionally found in the mouth, are very fully considered and illustrated—*e.g.*, *B. influenzae*, *B. of Friedländer*, *B. tuberculosis*, &c. The bacteriology of pyorrhœa alveolaris has not been neglected, a short chapter upon this disease finding a place, so also one of much greater length upon dental caries.

Nothing has been omitted by the publishers to detract from the excellence of Mr. Goadby's book, its general appearance being pleasing. We can confidently recommend its pages as worthy the study of those interested in the subject.

Practical Points in Gynecology. By H. M. MACNAUGHTON JONES, M.D., M.Ch., Master of Obstetrics (*Hon. Caus.*), Royal Univ., Ireland; F.R.C.S.; &c., &c. Third Edition. Pp. xii. and 188. With 24 Plates. London: Baillière, Tindall & Cox. 1902.

As this is the third edition of Dr. MacNaughton Jones's work which has appeared within a couple of years, the task of reviewing it is an easy one. His book is full of information of a most practical kind, and will be of use not alone to the specialist but to the general practitioner, a fact which is amply demonstrated by its popularity. The present edition contains, in addition to the contents of the former editions, the results of the experience gained by the writer during visits to many of the foreign clinics. We can strongly recommend it to all who are interested in operative gynaecology.

A Text-Book of Obstetrics for Practitioners and Students. By J. C. CAMERON, M.D.; E. P. DAVIS, M.D.; R. L. DICKINSON, M.D.; H. J. GARRIGUES, M.D.; BARTON COOKE HIRST, M.D.; CHARLES JEWETT, M.D.; H. A. KELLY, M.D.; R. C. NORRIS, M.D.; C. D. PALMER, M.D.; G. A. PIERSOL, M.D.; E. REYNOLDS, M.D.; H. SCHWARZ, M.D.; J. C. WEBSTER, M.D.; R. C. NORRIS, M.D., Editor; and R. L. DICKINSON, M.D., Art Editor. Two Vols. Pp. 554 and 546. With nearly 900 Illustrations. Second Edition, Revised. London and Philadelphia: Saunders & Co. 1902.

THE first edition of the work before us was well known as the pioneer of the modern well illustrated work on obstetrics, and as such attained a not inconsiderable reputation. It is safe to say that at the date of its appearance there was no other work on obstetrics illustrated in anything so complete a manner, and, though since that time many well illustrated

works have appeared, the Norris Midwifery—as it is usually known—is still able to hold the position it won for itself.

The present edition of the work has undergone a thorough revision, evidences of which are to be found on every page; several of the illustrations have been re-drawn, while others have been added. Dr. J. Clarence Webster has been added to the list of contributors, and has re-written the article on "Diseases of the Ovary," and on "Premature Expulsion of the Uterine Contents," which were contributed to the former edition by the late Dr. Etheridge.

For the work as a whole we have a large mead of praise. It is, of course, unavoidable that when many contributors unite to produce a single work there are many overlappings, and some inconsistencies; but, on the other hand, the reader has placed before him the opinions of the most eminent American obstetricians. The illustrations alone render the work worthy of a place in the library of every practising obstetrician, while as a work of reference it is valuable in the highest degree to both the specialist and the general practitioner.

Golden Rules of Refraction. By ERNEST MADDOX, M.D.

Golden Rules Series No. xii. Bristol: John Wright & Co.

London: Simpkin, Marshall, Hamilton, Kent & Co., Ltd.

"THIS tiny volume is," says the author, "intended chiefly for the help of general practitioners, who may be commencing the study of refraction," and "may be regarded as a little miniature of a subject to which only a large volume could do justice."

We have a great objection, as a rule, to these "tiny volumes," as they are so liable to produce mental dyspepsia; but in spite of this we feel bound to say that Dr. Maddox has succeeded in making his subject tolerably digestible, and, if taken in small doses, and pondered upon judiciously, we feel sure that even a beginner in the art will, from its pages, gain much of the knowledge that he requires.

Dr. Maddox is such a perfect master of his subject that he has succeeded in doing what few could have done so well; he knows what to omit, and so can make even this miniature

convey much information without the usual dangers attendant upon the ingestion of concentrated essences of its kind. The work is perfection.

Aids to Gynaecology. By ALFRED S. GUBB, M.D. (Paris), M.R.C.S. : late Resident Obstetrical Physician, Westminster Hospital; Fellow of the Royal Medical and Chirurgical Society, &c. Fourth Edition. Tenth Thousand. Foolscap 8vo. Pp. 136. With 29 Illustrations. London : Baillière, Tindall & Cox. 1902.

THIS little work is an epitome of the signs, symptoms, and treatment of the diseases peculiar to women. It is clearly and concisely written, and is doubtless of value to many students, as its ready sale clearly shows. In the present edition the text has been re-written almost in its entirety, and several diagrams and illustrations of instruments have been added, as well as an appendix containing a therapeutical index. Although we do not, as a rule, regard works of this class as altogether suitable for the use of students, still, in those cases in which time forbids the study of a larger work, we can recommend Dr. Gubb's little book as reliable and accurate.

The Irish Technical Journal. A Record of Agricultural and Technical Education in Ireland. Edited by R. MACDONALD, M.A., B.Sc. Vol. I. No. 1. March, 1903.

WE welcome the first number of a Journal which may be productive of much advantage to the cause of technical education in this country ; and we congratulate the editor on the manly yet modest editorial in which he introduces this latest literary outcome of the great national movement which is at present passing over Ireland. He says :—

“ There is needed in Ireland a Journal to which one may turn for information as to what is being done in the country by the Urban, Municipal, and County Committees working under the Department of Agriculture and Technical Instruction.

“ Such a Journal should not only supply a steady stream of information, but should open its columns to a free expression

by the public as to the needs of Ireland, and how these needs should be met.

"Men who are well informed on special subjects, bearing on the work of the Department, should be able, through such a Journal, to address a larger audience than they would if their views were expounded to one local Committee.

"*The Irish Technical Journal* will exactly meet that want. In this Journal the general public, who are virtually interested in the success of Agricultural and Technical Education, will be able to follow its progress in Ireland.

"The peculiar needs of Ireland, its present opportunities, and its claims will be never-failing texts for its pages.

"The future prosperity of Ireland is bound up with the Education of her people; Technical Instruction, in all its forms, will play an important part in bringing that prosperity to pass; and the Journal will aim at promoting this branch of the National Education.

"It will be impossible to ignore political and sectarian differences; but they will not be debated. They will be taken for granted, like the weather, and the best made of them. That such a course is possible has already been demonstrated, for, throughout Ireland, the Agricultural and Technical Instruction Committees have steadily aimed at the general good; and this policy of the Committees will be adopted by the Journal."

Most heartily do we wish success to *The Irish Technical Journal*, for we recognise that the welfare of the Medical Profession is bound up with the prosperity of Ireland.

A Manual of Practical Medical Electricity, the Röntgen Rays, and Finzen Light. By DAWSON TURNER, M.D., F.R.C.P. Ed.; Lecturer on Experimental Physics, Surgeons' Hall, Edinburgh; Medical Officer in Charge of the Electrical Department, Royal Infirmary, Edinburgh. Third Edition, Revised and Enlarged. London: Baillière, Tindall & Cox. 1902. Pp. 396.

WE are much pleased with this book and can recommend it. It is written in a clear and simple style, and, beginning with the most elementary matters, explains the subject in such a

way as to be intelligible to those who have not much acquaintance with the theory of electricity. It will, therefore, be found useful both as a text-book of medical electricity and also as an introduction to the subject suitable for medical practitioners. It is divided into six parts. The first treats of electro-physics: the laws of electricity, the kinds of electricity, and the various apparatus in ordinary use are explained. Many useful illustrations are introduced. Electro-physiology and electro-diagnosis are discussed in the next sections; then the surgical and gynaecological uses of electricity. In Part V., on electro-therapeutics, we note that Dr. Turner seems to have found that static electricity is, on the whole, more useful than galvanic or faradic currents, and mentions the practice of the Salpêtrière Hospital, where static electricity is chiefly used for therapeutical purposes; faradism much less, and galvanism serves only as a diagnostic agent. Part VI. is devoted to X-rays and Finsen Light treatment.

We think that in a work of this size a little more space might have been devoted to some of the details of the therapeutic applications of electricity. On the other hand, what we may call the scientific side of the subject—instruments, batteries, &c.—is excellently done. The illustrations and printing are excellent.

Transactions of the British Congress on Tuberculosis for the Prevention of Consumption. In Four Volumes. London: W. Clowes & Sons. 1902.

THESE volumes form a lasting monument of the labours of the Congress. Volume I. contains accounts of the general meetings and lists of delegates and members. Volume II. contains the reports of the work of the State and Municipal Section; and Volume III. that of the Medical Section. In it we find various novelties in the way of treatment, intravenous injections of formalin, of protargol, subcutaneous injections, intratracheal injections, doses of urea, and various other methods, of which probably only a few will stand the test of time. In this volume is also contained the report of the Section on Pathology and Bacteriology. In Volume IV. is printed the work of the Veterinary Section, containing most valuable papers and discussions on milk and meat.

LIQUOR COLCHICINÆ SALICYLATIS.

(HOPKINSON'S)

A Specific for Gout and Rheumatism.



Baiss Brothers & Stevenson, Ltd.,

Manufacturing Chemists and

Wholesale Druggists, - -

CONTRACTORS TO H.M. GOVERNMENT.

JEWRY STREET, LONDON.

HOPKINSON'S

Liq: Colchicinæ Salicylatis

Gives Immediate Relief in all Cases of
RHEUMATOID ARTHRITIS, CHRONIC RHEUMATISM,
GOUT, and LUMBAGO.

*Each fluid drachm contains $\frac{1}{32}$ grain of Salicylate
of Colchicine.*

A feature to which we desire to draw special attention is that no depressing effect is produced, and the action of the kidneys and liver is not affected.

Numerous favourable reports have been received from members of the Medical Profession, a few of which are appended, and this preparation created great interest at the recent Congress of the British Medical Association.

It is found impossible to get the same result with Colchicum Wine and Salicylic Acid.

DOSE.—A TEASPOONFUL DILUTED, TWICE A DAY BETWEEN MEALS.

PRESCRIBE—Liquor Colchicinæ Salicyl (Hopkinson's).

TESTIMONIALS.

EASTWOOD, *April 29th, 1893.*

DEAR SIRs,—I have now prescribed your **Liquor Colchicinæ Salicyl** for several months with marked effect in every case. Before it was brought under my notice in the *Lancet*, I never prescribed the ordinary remedies with any confidence. Your spécialité, however, gives me the utmost satisfaction, and I can confidently recommend it to my brother practitioners. It has no depressing effect on the heart.

I am, dear Sirs, yours faithfully,

— —, M.R.C.S., ENG.

PLEASLEY, MANSFIELD, *May 18th, 1893.*

GENTLEMEN,—I have much pleasure in testifying to the great benefit I have experienced from the use of your **Liquor Colchicinæ Salicyl** in my own case for lumbago. During the 18 months I have used it (for three separate attacks) it has **not failed me once**. I have always experienced relief within half-an-hour of the time of taking the first dose, and three or four doses have invariably succeeded in subduing the attack, and that without causing any unpleasant effect whatever, or even necessitating confinement indoors. I regard it as a valuable remedy for this and similar complaints. I shall take care to have it by me for personal use, and shall prescribe it to my patients.

Yours faithfully,

— —, M.B., C.M. (Univ. Aberd)

GREAT GRIMSBY.

DR. SMITH would be much obliged if Messrs. Hopkinson & Co. will send him, for his own use, another bottle of **Liquor Colchicinæ Salicyl**. He has derived great benefit from it.

LONDON, W., *May 15th. 1893.*

DEAR SIRs,—I have found your **Liquor Colchicinæ Salicyl** of great value in my own case. I was soon quite relieved from pain, after having been ill for a long time with rheumatic gout. I have prescribed and recommended it to a great many people since, and have heard good results in every case.

Yours truly,

— —, F.R.C.S., ENG.

Extract from the "BRITISH MEDICAL JOURNAL."

"A preparation which is said to be very successful in the treatment of Chronic Rheumatism, Gout, and Lumbago, is prepared under the name of **Liquor Colchicinæ Salicyl** (Hopkinson); 60 minims diluted contain $\frac{1}{2}$ of a grain of Salicylate of Colchicine.

Sold in 1 lb., $\frac{1}{2}$ lb., $\frac{1}{4}$ lb., and 2 oz. bottles. Price 16/- 8/6, 4/6, and 2/6 each.

~~~~~  
*May be had either direct from . .*

## Baiss Brothers & Stevenson, Ltd.,

MANUFACTURING CHEMISTS,

4, JEWRY STREET, LONDON, E.C.,

*Or through your own Chemist or any Wholesale Drug House.*

SAMPLES FREE.

## Mist. Bismuthi Aromat. (BAISS)

THIS valuable remedy has been before the Medical Profession, and has been much appreciated by them for the past 28 years. It is useful for Dyspepsia, Gastric Distress, Impaired Digestive Powers, and Gastrodynia. It is an elegant compound, very palatable, *retained by the most enfeebled patient*, and has no precipitate. The component parts are on every label—it is no secret formula. Each teaspoonful contains  $1\frac{1}{2}$  minims Acid Hydrocyanic B.P.,  $\frac{1}{32}$  grain Morphia, 6 minims Tinct. Nucis Vom. with Bismuth, in its most efficacious form and Chloroform.

**Dose.**—One fluid drachm.

Sold in 1 lb. bottles 4/=-, 2 lb. bottles 7/9, 4 lb. bottles 15/- each

*PRESCRIBE—Mist. Bismuthi Aromat. (BaiSS).*

## Mist. Bismuthi . . . . . . Aromat. c̄ Pepsina. (BAISS)

Is identical with above preparation, with the addition of 2 grains Pure Pepsin Porci in each fluid drachm.

**Dose.**—One fluid drachm.

Sold in 1 lb. bottles 4/6, 2 lb. bottles 8/6, 4 lb. bottles 16/- each

## Liq. Caulophylli et Pulsatillæ.

Price, 4/6 per lb.

A VALUABLE uterine sedative and tonic in affections of the utero-genital organs.

**Dose.**—10 to 30 minims.


## Liq. Euonymi et . . .

## Cascaræ Sagradæ Co.

Price, 6/- per lb.

THE well-known laxative properties of Cascara in combination with Euonymin renders this an invaluable preparation in hepatic troubles, and is much esteemed by the profession.

**Dose.**— $\frac{1}{2}$  to 1 drachm.

 SAMPLES FREE.

## PART III.

### SPECIAL REPORTS.

---

#### SURGERY.

By WILLIAM TAYLOR, B.A., M.B., Univ. Dubl.: Fellow and Member of Council, R.C.S.I.; Surgeon to the Meath Hospital and County Dublin Infirmary.

##### ARTERIORRHAPHY FOR CURE OF ANEURYSM.

IN the *Annals of Surgery* for February, 1903, will be found an interesting paper by Rudolph Mates, M.D., of New Orleans, describing an operation for the radical cure of aneurysm, based upon arteriorrhaphy. The principles which underlie the technique of this operation are simple. "The dominant and essential feature of the operation is that the aneurysmal sac is regarded as a large diverticulum or prolongation of the artery with which it is connected, that the lining membrane of the sac is a continuation of the endothelial intima which lines the interior of the artery, and that the sac itself, when not disturbed from its vascular connections, is capable of exhibiting all the reparative and regenerative reactions which characterize the endothelial surfaces in general when subjected to irritation."

The following are the steps of the operation as applied to peripheral aneurysms of the larger arteries:—

1st. A temporary hæmostasis is produced either by elevation of the limb for a few minutes to render it bloodless, and then, by the application of an Esmarch's rubber band, or by exposing the artery near the cardiac side of the tumour and compressing it by a padded forceps or with a traction loop. This method of applying pressure to the exposed artery has the disadvantage that it does not control the anastomotic circulation, which may communicate directly with the sac, and thus considerably embarrass the operator until it is controlled. In the case of carotid and other cervical aneurysms, the circulation is so free on the distal side that the circulation should also be controlled by pressure on the distal as well as the proximal side of the tumour.

2nd. When the circulation has been effectively controlled by one of these methods, a free incision, parallel to the long axis of the aneurysm, should be made through the skin, and deepened until the sac is exposed from pole to pole.

3rd. A free incision is now made into the sac, extending from one extremity of the tumour to the other in its longest diameter, and in the line of the main artery. Any blood and clots are then removed, and the interior of the cavity is freely exposed to view by retraction of its edges. In this way all the orifices which open into the sac will be exposed, while the type of sac itself will be disclosed. If it is a "fusiform" aneurysm, two large openings will be seen, usually at the bottom of the sac, separated by an intervening space of variable length, and frequently marked by a shallow groove, which represents the continuation of the floor of the artery. If the aneurysm is of the "sacculated" variety, one opening of variable size and shape will be seen, by which the artery communicates with the sac. This differentiation of the sac into these two varieties has most important bearings upon the further aims of the technique. In the "fusiform" type the artery blends so completely with the sac walls that its continuity cannot usually be restored. In such a case the object is simply to seal up the openings leading to the artery for purposes of hæmostasis and obliteration of the sac; whereas in the "sacculated" type, in which the sac communicates with the main artery by a single opening, it is quite possible to close the opening of communication without encroaching upon the lumen of the main vessel, thus maintaining the functional as well as the anatomical continuity of the artery. In fusiform aneurysms, the sac having been opened as already described, after the chief openings have been identified, careful search is made for the openings of any collateral branches, or branches springing from the sac, which, if not sutured, would give rise to troublesome hæmorrhage. The interior of the sac should be gently, but thoroughly, scrubbed with gauze soaked in sterilised salt solution, so as to remove any adherent laminated blood-clots which would interfere with the healing of the sutured surfaces.

4th. The orifices of the main vessel are then carefully closed with sutures. The suture material used is either silk (twisted,



braided, or floss), chromicised catgut, or even the finest kind of kangaroo tendon. The size of the suture must correspond with the size of the needle, which in turn should vary in size with the dimensions of the opening to be closed, and the density of the tissues to be sutured. The author himself prefers chromicised catgut (Nos. I, II, and III.). The needles are similar to the full curved, round intestinal needles. The suture may be either continuous or interrupted, the former being the more rapid, and just as effective. Eight to ten sutures used to the inch, the author states, are more than sufficient. In suturing wounds of normal arteries, very fine needles and silk should be used, and the sutures should enter the vessel  $\frac{1}{16}$  to  $\frac{1}{20}$  of an inch apart. In aneurysmal cases the conditions are different, for the aneurysmal tissues are so much thicker and more easily approximated. A most important point seems to be to secure a firm grip of the sac tissues so as to get good, broad approximating surfaces. "In dealing with the larger openings in this class of aneurysms, the needle should penetrate at least  $\frac{1}{4}$  or  $\frac{1}{3}$  of an inch beyond the margin of the orifice, and then, after reappearing at the margin, dip again into the floor of the artery, and continue to the opposite margin as in the start. This mode of occluding the orifice of the main artery will secure a very complete apposition of a large marginal area, including the floor of the artery, which is visible under the orifice. When the openings must be closed quickly, as in cases in which there is considerable bleeding from collateral vessels, the dip of the needle into the floor of the vessel may be omitted, and the margins of the orifices brought together quickly with a continued suture." In these cases of fusiform aneurysm the author has found it advantageous to extend the first line of suture from one orifice to another, when the intervening space is not too long. These sutures include the floor of the sac, and are applied on the Lembert plan; thus the transverse diameter of the sac is diminished, while a foundation is laid for the obliteration of the sac cavity which is to follow. If the floor is dense, rigid, or bound down by adhesions to unyielding parts, the sutures should be limited to the orifices.

5th. "The sacculated aneurysm is the most favourable for the display of the conservative value of arteriorrhaphy from

every point of view. The intrasaccular suture of the orifice not only permits the radical cure of the aneurysm by closing its nutrient orifice, but also favours the restoration of the affected artery to its functional and anatomical integrity. The suture is here not only occlusive but reconstructive." The same type of needle and suture material is used here in approximating the edges of the opening leading from the main artery into the sac. "The needle should be made to appear just within the lower edge of the margin, care being taken that when the sutures are tightened the caliber of the artery will not be encroached upon so as to obstruct its lumen, and that the sutures will not be brought in contact with the blood in the lumen of the artery. Greater care must be exercised in securing accurate coaptation in this class of cases than in the fusiform type previously described." It is advised to begin the line of suture at some distance from the orifice, in order to secure a broader and stronger line of approximation.

The 6th step consists in the removal of the means used to control the blood flow—the temporary constrictor. The interior of the cavity should now remain perfectly dry; the only change that should be noticeable is the development of a more pinkish colour of the sac. Any oozing capillary points will usually be stopped by pressure.

The 7th step consists in the obliteration of the sac and the application of the dressings. The obliteration of the sac is the same in all cases, whether fusiform or sacculated in type. In large sacs, where the floor of the cavity is deeply situated, and there is an abundance, or even redundancy, of material, it is advised to reinforce the first line of occlusive sutures by a second row, applied also on the Lembert plan at a higher level. This row will considerably reduce the dimensions of the sac. "The closure of the space is now readily accomplished by turning the relaxed flaps of skin into the interior of the cavity. These flaps, in their relaxed state, can be made to touch the bottom of the cavity with comparative ease; one or two relaxation sutures on each side of the median line will usually suffice to tack down and hold the skin flaps in contact with the bottom and sides of the sac." The principle is the same as that of Neuber's method of closing bone cavities with cutaneo-periosteal flaps.

In cases of abdominal and iliac aneurysms, in which obliteration of the sac by inversion of the walls of the sac with the overlying skin will not be practicable, the same object will be obtained by inverting the sac walls with the overlying peritoneum which covers the aneurysm. "The peritoneum is not to be separated from the sac, and is utilised in place of the skin flaps with greater ease and certainty of successful union than when skin is used." In other situations, in which the skin flaps will not stretch to the bottom of a deeply placed cavity without excessive tension, rather than imperil the vitality of the skin by overstretching, it will be safer to obliterate the sac itself with its own walls, independently of the skin, by the introduction of a second or third row of sutures after the closure of the orifices; then any superfluous sac wall is cut away, and the free edges of the sac approximated by interrupted or continuous catgut sutures. The soft parts are then brought together by separate rows of buried sutures, the skin incision being closed without drainage. These procedures the author has been able to put into practice on four occasions—two of direct traumatic aneurysm of the brachial, caused by gunshot wounds, one femoral, and one popliteal, these latter being of the spontaneous variety. The first of these dated back to March, 1888.

A further suggestion in regard to the technique of the operation in dealing with fusiform aneurysms with two orifices has been made by the author, but he has not yet had an opportunity to put it into practice. It is suggested that it would not be impracticable or unreasonable, when favourable conditions presented themselves, such as in the larger aneurysms, which offer an abundance of material and a flexible floor, to go a step further and re-establish the continuity of the arterial channel. The principle of this suggested operation is precisely that adopted in Witzel's method of gastrostomy. A soft rubber catheter or tube, corresponding in diameter to the size of the parent artery, is laid on the floor of the sac, and is inserted as a guide into the two orifices of communication. Two lateral folds of the sac are now raised from the floor on each side of this catheter or tube, by means of two sets of sutures introduced on the Lembert plan. These ridges or folds are to be raised high enough on each side of the guide

to cover it completely in the middle line. A row of sutures should then be placed in a series from one of the main orifices to the other, leaving the catheter *in situ* until all are placed. The sutures are then all tied, except two in the centre of the line, which are not tied until the guide is removed. Where possible a second row of sutures should be superimposed. The advantages of such an original and novel procedure are obvious where its applicability is possible.

#### OPERATIVE TREATMENT IN SPINAL INJURY,

In the *Philadelphia Medical Journal* for June, 1902, will be found an extremely interesting account of a case reported by Drs. Stewart and Harte. This case will rather tend to upset some of the axioms formulated for the surgeon's guidance as to whether operative treatment should be resorted to in connection with injuries to the spine. It has been laid down as a pretty hard and fast rule that when the spinal cord is either divided or crushed operative interference should not be undertaken, under the impression that the spinal axons had little or no power to regenerate. This case of Stewart and Harte would seem to prove the power of regeneration; consequently cases that were hitherto looked upon as absolutely hopeless and left to die, may now be subjected to operative interference with some prospect—no matter how slight—of recovery.

The case reported was that of a woman who sustained a gunshot injury in the back. The bullet entered near the seventh dorsal spine and lodged in the spinal canal. There was immediate and complete loss of motion and sensation below the tenth dorsal vertebra behind, and below a point about three inches above the umbilicus in front. Operation was undertaken three hours after the accident. At the operation it was found that the right lamina of the seventh dorsal vertebra was crushed and the left lamina fractured at its base. The spines and laminæ of the seventh and eighth dorsal vertebræ were removed, and the bullet was found lying between the severed ends of the spinal cord. The *débris* having been washed out with saline solution, it was found that the ends of the cord were separated from one another by a space of three-quarters of an inch. The ends were, with some difficulty, approximated by three chromicised catgut sutures—one passed antero-posteriorly through the entire thickness of the cord,

the other two being passed transversely. The dura mater could not be approximated. The muscles were united by catgut, and the skin by silk-worm gut. The angle of the wound was drained for twenty-four hours. On the fifth day after this pain was complained of in the knee, and pressure on the calf of the leg could be felt as a pulling sensation in the back. On the fourteenth day she was able to recognise flexion of the foot as such, and this was followed by a strong contraction of the leg. The "cutis anserina" on exposure to cold was also noticed, while she was able to feel deep pressure over the limbs and abdomen. On the twenty-first day she was able to tell when her bladder was full, but could not empty it. On this day also the patellar reflex was detected. From this time on the progress was steady, but slow. On the sixtieth day she was able to go in a "Merlin chair," and with some effort she was able to feebly flex the knee. By the fifth month she was able to slide out of her bed without assistance. Menstruation reappeared in the eighth month. By the sixteenth month she was able to flex the toes, flex and extend the legs; flex, extend, and rotate the thighs, and was able to stand with one hand on a chair. The bowels were under control, except during an attack of diarrhœa. Occasionally there was nocturnal urinary incontinence. Her general health was excellent. The senses of touch, pain, temperature, and position were restored all over. The muscles were moderately rigid. The deep reflexes were marked. There was no reaction of degeneration, and there were no trophic changes in the skin or nails. There were no bedsores.

#### OPERATIVE INTERFERENCE FOR GASTRORRHAGIA.

The treatment of hæmatemesis due to gastric ulcer is a subject about which much is being written at present, both in England and abroad. In considering the indications for operative interference for gastrorrhagia due to ulcer it must not be forgotten that the source of the bleeding may be either an acute or a chronic ulcer. In a severe attack of bleeding from an acute ulcer, one seldom obtains a history pointing towards gastric trouble of any sort—much less ulcer. Hæmorrhage in cases of acute ulceration, according to Fenwick, is, in 75 per cent. of the cases, the first symptom. The amount of blood vomited is large and truly alarming to the friends, and the general symptoms are such as one would expect from any severe loss of blood. If the bleeding ceases reaction soon supervenes, but thirst and restlessness persist for some time.

Fortunately the hæmorrhage generally ceases quickly and is seldom repeated, or if repeated it is not severe. That the blood is rapidly poured out can be recognised by its bright red appearance and fluidity. As Mr. Moynihan puts it, in a paper read before the Royal Medico-Chirurgical Society on January 27th, 1903, and published in the *Lancet* for January 31st—“The characteristics of hæmorrhage from an acute ulcer are spontaneity, abruptness of onset, rapid loss of a large quantity of blood, marked tendency to spontaneous cessation, and the infrequency of its repetition in anything but insignificant quantity.”

In the case of chronic ulcer, on the other hand, the history antecedent to hæmorrhage is easily obtained to be that of pain after eating, or discomfort and fulness after meals, chronic indigestion and vomiting for months or years. The hæmorrhage varies considerably as regards quantity and frequency.

Mr. Moynihan, in the paper already alluded to, divides these cases into two groups :—

In one the hæmorrhage is trivial in amount, capricious in onset, irregularly repeated, and is merely an unexpected, and, on the whole, an unimportant addition to the usual attacks of vomiting.

In the second group the hæmorrhage is the predominant feature. In a patient who has been subject for years to hæmorrhage there has been a sudden attack of severe bleeding. This attack may or may not be, but in Mr. Moynihan's experience generally is, preceded by a notable accession of pain and gastric irritability for at least two or three days. The hæmorrhage is copious, half a pint at least, and very commonly a pint, being lost. After a quiescent period of twenty-four hours or more a second equally severe attack ensues, to be followed in its turn by a further period of quiet, which, like its predecessor, ends abruptly in a sudden and, on account of the weakness, generally more serious bleeding. In some rare cases the hæmorrhage has ended in a short time fatally from ulceration into a large vessel, such as the splenic artery. This result is, however, fortunately rare. After an attack of hæmorrhage from an acute ulcer, a speedy recovery is usually made; whereas in the case of hæmorrhage from a chronic ulcer, a persisting anæmia is almost constantly observed. “The

characteristics of hæmorrhage from a chronic ulcer, therefore, are (omitting the inconspicuous and immediately fatal cases) the onset after a long history of digestive disturbances culminating in acute discomfort for a few days, the tendency to recurrence with brief intermissions of a few hours or a day or two, the moderate quantity of blood ejected in each outbreak, and the condition of profound anæmia produced by the repeated loss of blood."

We find, then, the greatest differences of opinion expressed in regard to the operative treatment of the cases. For instance, Dieulafoy expressed the opinion that even in a first attack of hæmorrhage an operation should at once be undertaken if so much as half a litre of blood has been lost.

In an able paper on "Non-perforating Gastric Ulcer—Hæmorrhage," in the "Transactions of the American Surgical Association" for 1900, by W. L. Rodman, of Philadelphia, the author endeavoured to establish the indications clearly, but it is only by an attempt to realise the exact pathological conditions which may be present in each of the varieties that one would be most likely to come to a successful solution of the problem.

In the majority of those cases of hæmorrhage from an acute ulcer in which operation has been undertaken the blood has been seen coming from many simple erosions of the mucous membrane—as if the membrane were "weeping" blood. There was no vessel to ligature. Mr. Moynihan says: "Taking into account the characteristic features of the hæmorrhage from acute ulcers, and especially the very marked tendency to spontaneous arrest of the bleeding, it is difficult to be convinced that in these cases of 'weeping' mucous membrane any real benefit has accrued from operation; the surgical interference seems rather to have been in the successful cases a complication in what would otherwise have been an uneventful recovery." This writer's opinion is, that, in acute ulceration, hæmatemesis does not offer much scope for satisfactory treatment by the surgeon. It is, then, mainly in case of hæmorrhage from a chronic ulcer that surgical interference is of such importance. Here one has to deal with an ulcer, mostly with thickened edges, that is easily found. In many reported cases the bleeding point was readily seen. Here the hard, inflammatory, indurated condition of the base of the ulcer

traversed by the vessel, one side of which has become eroded, effectually prevents its contraction, consequently the hæmorrhage can be arrested only by the formation of a clot which plugs the opening for the time, but which may readily become detached or destroyed.

Mr. Moynihan sums up his conclusions on the treatment of hæmorrhage arising from gastric ulcer thus :—

"In hæmorrhage from an acute ulcer medical treatment alone will suffice; surgical measures will very rarely be called for. If any operation has to be done, gastro-enterostomy will probably prove to be most effective. In chronic ulcer operation should be advised as soon as possible. If readily exposed and not adherent to the pancreas or other organ, the ulcer, if solitary, may be excised, but a simple gastro-enterostomy is probably efficient to secure the arrest of the hæmorrhage and the rapid healing of the ulcers."

Amongst the operative methods which have been used or suggested from time to time in treating gastric hæmorrhage may be mentioned :—

I. Partial gastrectomy; pylorotomy, according to the location of the ulcer.

II. Gastro-enterostomy.

III. Gastrotomy with cauterisation, suture of the ulcer, or ligature *en masse* of the mucous membrane.

IV. Excision of the ulcer alone, with or without ligation of the principal artery—the edges being either subsequently sutured up or utilised for the performance of a gastro-enterostomy, if suitably placed.

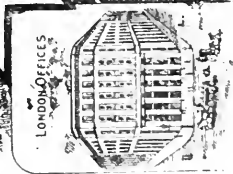
Gastro-enterostomy seems to have been as efficient, if, indeed, not more so, than any of the other procedures. In Mr. Moynihan's eight cases the ulcer in one was excised and the edges sutured, but death resulted on the eighth day. In one the ulcer was excised and the edges utilised in the performance of a posterior gastro-enterostomy, while in the remaining six cases gastro-enterostomy alone was performed, and all recovered. It seems strange that the only death resulted after what many would term the ideal operation. That gastro-enterostomy can effectually secure arrest of the hæmorrhage and promote healing of the ulcer seems established from these cases of Moynihan, as well as from the results of others who have had much experience in this branch of surgery.



# Friedrichshall

C. OPPEL & CO., Proprietors  
FRIEDRICHSHALL SAALFELD, Germany

London Manager,  
W. G. GREINER



10 & 12 MILTON STREET LONDON, E.C.

THE ORIGINAL AND OLD ESTABLISHED

## APERIENT MINERAL WATER

*Recommended by the leading medical authorities*

CAN BE OBTAINED FROM ALL THE WHOLESALE MINERAL WATER  
DEALERS. PATENT MEDICINE DEPOTS, &c.

# SPEIRS' "MODERN AND UP-TO-DATE"

## INEXPENSIVE, DURABLE, PORTABLE

### IRON AND WOOD ROOFED BUILDINGS

FOR  
PERMANENT or TEMPORARY

## HOSPITALS—SANATORIA

ASYLUMS  
RECEPTION HOUSES  
BUNGALOWS  
SHELTERS

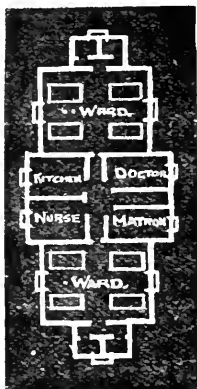
Designs and  
Estimates  
Free on  
Application

COTTAGES  
BED-ROOM ANNEXES  
LAUNDRIES  
HALLS, ETC.

TROPICAL HOUSES.

Terms of Payment arranged if desired.

Patented Improved Construction, Guaranteed as Comfortable  
as Stone Buildings, at One-third Cost of same.



Special facilities for  
economical erection in  
any part of  
the United Kingdom.

SPEIRS & CO.

Head Office:

125 West Regent St.,  
GLASGOW.

Contractors to H. M.

Government.

## SPEIRS' AUTOMATIC DRY EARTH CLOSETS.

Best and Cheapest in the Market.

PRICES ON APPLICATION.

## VD FRENCH CLARETS, SAUTERNES, & BURGUNDIES.

In answer to an existing demand expressed by correspondence in *The Times* and other leading papers for a **Guaranteed** Brand of French Clarets, Sauternes, and Burgundies, Messrs. ADET SEWARD & CO. (established 1852), proprietors of the **Vergniaud Cellars** in Bordeaux, have placed on the British market the following wines, under their guaranteed "**VD**" Brand. Each bottle bears in addition to the Registered Brand, "**V D**," a reference mark of growth and quality.

In a recent report on these wines the "*Lancet*" says:—

"We find them all in good condition, and characterised by a practical absence of acidity, and a minimum of sugar and alcohol. We believe them to be pure natural wines, and it is satisfactory to note that wines of such a class can be offered at moderate prices." (See "*Lancet*" Analytical Report, Sept. 6, 1902.)

### VD CLARETS.

|                                        |      |                                  |
|----------------------------------------|------|----------------------------------|
| V D 5. Margaux .. ..                   | 18/- | per doz.<br>bottles<br>net cash. |
| V D 4. St. Julien-Adet .. ..           | 23/- |                                  |
| V D 3. Larose .. ..                    | 28/- |                                  |
| V D 2. Château Talbot .. ..            | 36/- |                                  |
| V D 1. Château Montrose .. ..          | 44/- |                                  |
| V D 0. Château Mouton-Rothschild .. .. | 60/- |                                  |

### VD SAUTERNES.

|                             |      |                                  |
|-----------------------------|------|----------------------------------|
| V D 4. Barsac .. ..         | 23/- | per doz.<br>bottles<br>net cash. |
| V D 2. Haut Sauternes .. .. | 36/- |                                  |
| V D 0. Château Yquem .. ..  | 60/- |                                  |

### VD BURGUNDIES.

|                           |      |                                   |
|---------------------------|------|-----------------------------------|
| V D Beaune .. ..          | 23/- | per doz.<br>bottles.<br>net cash. |
| V D Pommard .. ..         | 28/- |                                   |
| V D Volnay .. ..          | 36/- |                                   |
| V D Chablis (White) .. .. | 26/- |                                   |

Half-bottles of each kind, 3/- extra per 24.

When ordering, the public are earnestly requested to ask for the "**V D**" Brand.

Agents for Home Trade and Export—

**MACMINN RICHARDSON & CO., 11 Hart Street, Mark Lane, E.C.**



## PART IV.

### MEDICAL MISCELLANY.

---

*Reports, Transactions, and Scientific Intelligence.*

---

#### ROYAL ACADEMY OF MEDICINE IN IRELAND.

President—LOMBE ATTHILL, M.D., F.R.C.P.I.  
General Secretary—JOHN B. STORY, M.B., F.R.C.S.I.

#### SECTION OF STATE MEDICINE.

President—NIXIAN M. FALKNER, M.D., F.R.C.P.I.  
Sectional Secretary—F. C. MARTLEY, M.D., F.R.C.P.I.

*Friday, February 20, 1903.*

THE PRESIDENT in the Chair.

#### *President's Address.*

IN a brief Address the PRESIDENT reviewed the "Nomenclature of Diseases and Causes of Death," from the period of William Cullen, of Edinburgh, up to the year 1901, when Dr. Tatham's modification of the nomenclature of diseases (1896) was adopted for the official reports on Vital Statistics for these countries. In the course of the Address he appealed to the medical profession to consider the importance of giving a well-defined and accurate "cause of death" when framing the certificate, as it was on this testimony, and this testimony alone, that the value of the medical statistics of the nation depended. [The Address will be found in full at page 241.]

After the conclusion of the Address, the following resolution was proposed by Dr. Bewley, seconded by Dr. Parsons, and passed unanimously:—"That in the opinion of the Section of State Medicine of the Royal Academy of Medicine in Ireland, it is advisable that the department of the Registrar-General of Ireland should be represented on the Nomenclature of Diseases Committee at present sitting in London."

*Soup Impregnated with Copper.*

DR. MARTLEY exhibited a specimen of soup made in a tin-lined copper boiler, which, owing to the tin having worn away in places, was largely contaminated with copper. There was a thick black precipitate in which alone the copper was found, the clear fluid above it being quite free from it.

The Section then adjourned.

---

SECTION OF PATHOLOGY.

President—E. J. McWEENEY, M.D.

Sectional Secretary—A. H. WHITE, F.R.C.S.I.

*Friday, February 27, 1903.*

THE PRESIDENT in the Chair.

*Cancer of Ovary.*

DR. JELLET showed, with PROFESSOR O'SULLIVAN, a specimen of double adeno-carcinoma of the ovary. He said that the specimen had been removed from a patient, aged about forty. She had been in comparatively good health until December, 1901, when her menstruation ceased and she believed herself to be pregnant. In the following June she noticed a swelling in the left iliac fossa, and at the same time suffered from severe attacks of pain. The tumours were removed in September. At the operation there was no apparent involvement of the pedicle, nor were there noticeable enlarged glands. The subsequent history of the case was difficult to obtain. He saw the patient two months after the operation, and there was then a small, irregular mass in the bottom of Douglas's pouch. This may have been a malignant extension or a fæcal collection, but as the patient refused further treatment it was impossible to definitely determine the point.

PROFESSOR O'SULLIVAN described the solid ovarian tumours as being to the *naked eye* very much alike and about the size of a clenched fist, with surface smooth, uneven, with large projections. The tumours were enclosed in what appeared to be a dense fibrous capsule, but which proved to be the condensed and flattened stroma of the ovary. On section the greater part of the growth was white, resembling ovarian tissue in its markings, but firmer. In one place there was a large blood extravasation. Through the white substance were minute cavities the size of a pin-head and smaller, and occasionally much larger ones—cysts. The largest

of these was filled with a papillary growth and contained a glairy fluid. On examination under the microscope the tumour was found to consist of a stroma resembling the ovarian stroma cells, with spindle and rod-shaped nuclei, and a very small quantity of intercellular substance. The blood vessels which ran in the stroma were well formed and fairly thick-walled: both arteries and veins could be made out. Embedded in this stroma were epithelial structures varying in appearance in different parts. In some places were cysts lined with a high columnar epithelium, ranging in size from a pea down. They contained a granular material with a few swollen cells. These structures were found down to a size when the single layer of epithelium filled up the whole lumen. The largest of these cysts contained papillary growths. Through the rest of the tumour were solid masses of pleomorphic epithelium lying in the stroma and communicating with each other, forming a network of epithelial strands about equal to the stroma in bulk, and traversing it in all directions. The only solid ovarian tumour which bears any resemblance to this of which he had seen an account is a tumour described by von Kahlden (*Centralblatt f. Path.*). In this growth part was composed of small cysts, part of thick columns of cells. These two were separated by a fibrous partition. He distinguishes them as the cancerous changed portions and regards the growth as derived from the follicular epithelium. Here the two forms of growth appear to be intermixed. Both can be seen in the same microscopic field.

THE PRESIDENT said that the case was undoubtedly one of true carcinoma of the ovary. The bilateral character of the affection was typical. The relatively slow development of metastatic infection was likewise often observed in ovarian cancer. He had himself observed three cases, in the last one of which the microscopic appearances were very similar to those seen in this case, save that the adenomatous element was less pronounced. Learning from the writers that recorded cases of ovarian cancer are few in English literature, he proposed to publish the notes of those he had observed.

DR. EARL said he had examined several cases of cancer of the ovary, probably some eight or more. Both ovaries were affected in each case. In two cases the cancer was in an early stage of mucoid degeneration, and in one case at least there were secondary growths in the peritoneum and liver.

DR. JELLET said that he did not consider ovarian cancer to be

very rare. He had operated on one other case, and had seen at least four in the Rotunda Hospital. As to the question of malignancy, one at least of these ran a most malignant course. Metastases occurred in the retro-peritoneal glands, and ate through the spinal column, death resulting within three months of the operation.

*Abnormal Deposit in Joints.*

PROFESSOR E. H. BENNETT showed a series of joints marked by the deposit of a white material closely resembling the urate of sodium seen in true gout. [The description will be found at page 161.]

THE PRESIDENT asked what distinction Professor Bennett drew between the condition he now demonstrated and calcification, such as occurs in costal cartilages and many morbid tissues.

DRS. TRAVERS SMITH and KNOTT spoke.

PROFESSOR BENNETT, in reply, pointed out that in this case the calcium carbonate occurred in the form of small crystals.

*Sarcoma of the Duodenum.*

DR. PARSONS and PROFESSOR O'SULLIVAN exhibited a sarcoma of the duodenum with microscopical sections.

THE PRESIDENT considered it to be in all probability a round-cell sarcoma, but could not explain the hybrid matter referred to by Professor O'Sullivan. He asked how it behaved to the Van Gieson triple stain? He thought the case ought to be submitted to the Committee of Reference.

*Fracture of the Astragalus.*

PROFESSOR E. H. BENNETT showed a united fracture of the astragalus. The fracture had united without deformity by bone. There was no other fracture either in the bones of the foot or of the leg or thigh. The specimen was found in dissection, and was without history.

*Primary Cancer of Liver in a Girl, aged Twenty-one.*

DR. W. J. THOMPSON read a case, which will be found at page 272.

PROFESSOR MCWEENEY said the liver is much enlarged; its surface is studded with secondary nodules, some of these umbilicated. The colour is dull red with a greenish tinge. The nodules, viewed from without, are white. On section, the primary mass was

found occupying the centre of the right lobe. It was as large as the closed fist and harder than the secondary knots. On cutting into the specimen a most remarkable change took place in its colour, *most of the secondary knots assuming a brilliant grass-green hue on contact with the air.* This green hue subsequently extended to the liver parenchyma after the specimen had been placed in formalin. Spectroscopic and other tests showed it to be due to oxidised bile-pigment. The cancer was composed of very large epithelial cells closely resembling liver-cells, but differently arranged. Many of them were crammed with globules of green pigment, and here and there presented an attempt at tubular arrangement, the lumen being filled with green matter. It was evident that the cancerous degeneration had not robbed the tumour-cells of their function, and that they had continued to secrete bile, though several generations removed from normal liver cells. The bile-pigment so secreted, finding no outlet, was stored up in the cells, and revealed its presence by the green hue at once assumed on section by the cancer tissue.

The Section then adjourned.

---

#### THE SANITARY INSTITUTE.

MR. E. WHITE WALLIS, Secretary, Parkes Museum, Margaret-street, W., informs us that the Twenty-first Congress of the Sanitary Institute will be held at Bradford, Yorkshire, from July 7th to 11th, 1903. The President will be the Right Hon. the Earl of Stamford. Section I.—Sanitary Science and Preventive Medicine—will be presided over by Professor Clifford Allbutt, M.A., M.D., F.R.C.P., D.Sc., F.R.S., J.P., D.L., Regius Professor of Physic in the University of Cambridge. Section II.—Engineering and Architecture—will be presided over by Maurice Fitzmaurice, C.M.G., M. Inst. C.E. Section III.—Physics, Chemistry, and Biology—will be presided over by Professor C. Hunter Stewart, D.Sc., M.B., C.M., F.R.S.E. The lecture to the Congress will be given by J. Slater, B.A., F.R.I.B.A. Eight Technical Conferences will also be held in connection with the Congress, presided over by Councillor W. C. Lupton, Prof. Thomas Oliver, M.A., M.D., F.R.C.P.; J. Spottiswoode Cameron, M.D., B.Sc.; T. H. Yabbeicom, M. Inst. C.E.; C. Drabble, M.R.C.V.S.; Mrs. Moser, James Kerr, M.A., M.D., D.P.H.; and Mr. Isaac Young, respectively.

## CORK MEDICAL AND SURGICAL SOCIETY.

*Wednesday, March 11, 1903.*

P. T. O'SULLIVAN, M.D., President, in the Chair.

### *Alcoholic Cirrhosis of the Liver.*

THE PRESIDENT read notes of a case of alcoholic cirrhosis of the liver and ascites in a woman aged forty-five, which had been successfully treated by operation. The patient had been tapped six times,  $12\frac{1}{2}$  pints being withdrawn on the last occasion, and the usual remedies having failed to give relief, it was ultimately decided to try operative measures.

DR. ATKINS read notes of the operation, which was that practised by Morrison, of Newcastle-on-Tyne, and consisted in suturing the omentum to the abdominal wall, thus opening a connection between the omental and epigastric veins, and relieving the portal circulation. An incision was made at the junction of the middle and lower thirds of a line drawn from the ensiform cartilage to the umbilicus, and this incision was carried to the right for a distance of four inches. The omentum was then stitched to the abdominal wall throughout the length of the incision, and the abdomen drained through a glass tube, through which a good deal of fluid flowed for some days following the operation, after which it was removed. The patient had been in excellent health since the operation, over three months ago, and there was no return of the ascites. At present the superficial veins over the upper part of the abdomen were greatly distended, showing that the collateral circulation aimed at had been well established.

### *Recurrent Carcinoma of the Breast.*

DR. ATKINS read notes of a case of recurrent carcinoma of the breast, cured by removal of the uterine appendages. Miss C., a single lady, aged forty-three, had had one breast completely removed 14 months previously for carcinoma, and the axillary glands carefully excised. On examination several small hard nodules could be felt under the clavicle and in the axillary fold, and there was considerable œdema of the arm. Both ovaries and Fallopian tubes were then removed. Soon after the operation the nodules began to diminish in size, and became softer, and



finally they all completely disappeared, the oedema of the arm also disappearing. At the same time the patient was put on thyroid extract (5 grains thrice daily), and is still taking it. According to Alban Doran, it is important that the utero-ovarian ligaments should be completely removed, as he says that true ovarian tissue may be sometimes found in these ligaments.

### *The Diseases of Infancy.*

DR. PHILIP G. LEE read a paper on the "Study of Diseases of Infancy." He said that this subject was greatly neglected both by medical students and by the general body of medical men; that it could not be studied properly in general hospitals, and should not be merely an addition in the educational curriculum to the subjects of midwifery and gynaecology, with which it had nothing in common. Most general practitioners were careless and slipshod in their examination of children, owing to the time and trouble involved, and the fact that one had to depend exclusively on one's own powers of observation in making a diagnosis. Medical men attached to children's hospitals frequently came across cases of errors in diagnosis which even an ordinary examination would have rendered impossible, though it should not be forgotten that many diseases ran a different course in children from that taken by them in adults. After referring to the enormous infant mortality in the community, especially in work-houses and other public institutions, he said that a great deal of this was preventable, being due to the want of simple hygienic precautions, and to the apathy both of the profession and the public on the subject. He pleaded for a more systematic study of children's diseases, and greater care in the examination of the little patients.

### CEREBRAL SYPHILIS.

A. E. BROWNRIGG (*Boston Medical and Surgical Journal*, Jan. 22, 1903) considers that the main signs which suggest the condition are:—Headache and vertigo; nausea and vomiting; optic neuritis; cranial-nerve palsies or paralyses; apoplecticiform attacks or more gradual attacks of somnolence or coma, with partial hemiplegia; irritability and general mental failures; polyuria and polydipsia; marked remittent character to all the symptoms and their changeability. —*The Monthly Cyclopaedia of Practical Medicine*, Philadelphia, February, 1903.

# SANITARY AND METEOROLOGICAL NOTES.

Compiled by SIR JOHN MOORE, B.A., M.D. Univ. Dubl. ;

F.R.C.P.I. : F.R. Met. Soc. :

Diplomate in State Medicine and Ex.-Sch. Trin. Coll. Dubl.

## VITAL STATISTICS.

*For four weeks ending Saturday, February 28, 1903.*

## IRELAND.

### TWENTY-TWO TOWN DISTRICTS.

THE average annual death-rate represented by the deaths—exclusive of deaths of persons admitted into public institutions from without the respective districts—registered in the week ending February 28, 1903, in the Dublin Registration Area and the twenty-one principal provincial Urban Districts of Ireland was 21·7 per 1,000 of their aggregate population, which, for the purposes of these returns, is estimated at 1,093,289. The deaths registered in each of the four weeks ended Saturday, February 28, and during the whole of that period, in the several districts, alphabetically arranged, corresponded to the following annual rates per 1,000 :—

| TOWNS, &c.         | Week ending |         |         |         | Average Rate for 4 weeks | TOWNS, &c.  | Week ending |         |         |         | Average Rate for 4 weeks |
|--------------------|-------------|---------|---------|---------|--------------------------|-------------|-------------|---------|---------|---------|--------------------------|
|                    | Feb. 7      | Feb. 14 | Feb. 21 | Feb. 28 |                          |             | Feb. 7      | Feb. 14 | Feb. 21 | Feb. 28 |                          |
| 22 Town Districts  | 24·3        | 23·0    | 21·5    | 21·7    | 22·6                     | Lisburn -   | 9·1         | 22·7    | 22·7    | 13·6    | 17·0                     |
| Armagh -           | 13·7        | 13·7    | 20·6    | 34·4    | 20·6                     | Londonderry | 31·5        | 26·5    | 11·3    | 11·3    | 20·2                     |
| Ballymena          | 23·9        | 19·2    | 14·4    | 9·6     | 16·8                     | Lurgan -    | 26·6        | 35·4    | 22·1    | 13·3    | 24·3                     |
| Belfast -          | 22·5        | 20·6    | 20·8    | 21·5    | 21·4                     | Newry -     | 8·4         | 37·8    | 33·6    | 42·0    | 30·4                     |
| Clonmel -          | 46·2        | 20·5    | 35·9    | 5·1     | 26·9                     | Newtownards | 34·3        | 22·9    | 17·2    | 5·7     | 20·0                     |
| Cork -             | 24·0        | 26·0    | 21·2    | 25·3    | 24·1                     | Portadown   | 20·7        | 10·3    | 5·2     | 5·2     | 10·4                     |
| Drogheda -         | 28·6        | 20·4    | 32·7    | 4·1     | 21·5                     | Queenstown  | 39·6        | 26·4    | 26·4    | 0·0     | 23·1                     |
| Dublin (Reg. Area) | 26·4        | 25·0    | 20·7    | 25·9    | 24·5                     | Sligo -     | 24·0        | 38·4    | 19·2    | 4·8     | 21·6                     |
| Dundalk -          | 39·9        | 19·9    | 31·9    | 27·9    | 29·9                     | Tralee -    | 5·3         | 31·7    | 15·9    | 15·9    | 17·2                     |
| Galway -           | 19·4        | 3·9     | 62·1    | 3·9     | 22·3                     | Waterford   | 25·3        | 19·5    | 25·3    | 15·6    | 21·4                     |
| Kilkenny -         | 19·7        | 9·8     | 14·7    | 14·7    | 14·7                     | Wexford -   | 14·0        | 4·7     | 28·0    | 37·4    | 21·0                     |
| Limerick -         | 17·8        | 27·3    | 24·6    | 20·5    | 22·6                     |             |             |         |         |         |                          |

The deaths (excluding those of persons admitted into public institutions from without the respective districts) from certain epidemic diseases, registered in the 22 districts during the week ended Saturday, February 28, were equal to an annual rate of 1·9 per 1,000, the rates varying from 0·0 in fourteen of the districts to 16·8 in Newry, the 10 deaths from all causes registered in that district including 4 from measles. Among the 148 deaths from all causes in Belfast are 3 from measles, one from scarlet fever, one from whooping-cough, 2 from diphtheria, 5 from enteric fever, and 2 from diarrhoea. The 37 deaths in Cork from all causes include one from whooping-cough.

#### DUBLIN REGISTRATION AREA.

The Dublin Registration Area now consists of the City of Dublin as extended by the Dublin Corporation Act, 1900, together with the Urban Districts of Rathmines, Pembroke, Blackrock, and Kingstown. The population of this Area is 378,994; that of the City being 293,385, Rathmines 33,203, Pembroke 26,025, Blackrock 8,759, and Kingstown 17,622.

In the Dublin Registration Area the births registered during the week ended Saturday, February 28, amounted to 203—110 boys and 93 girls; and the deaths to 195—88 males and 107 females.

#### DEATHS.

The deaths registered represent an annual rate of mortality of 26·8 in every 1,000 of the population. Omitting the deaths (numbering 7) of persons admitted into public institutions from localities outside the Area, the rate was 25·9 per 1,000. During the eight weeks ending with Saturday, February 28, the death-rate averaged 27·2, and was 3·4 below the mean rate for the corresponding portions of the ten years 1893–1902.

One death from measles was registered. In the preceding week there had been 6 deaths from this disease. There were 3 deaths from scarlet fever; in the 4 previous weeks the deaths from this disease were 3, 3, 3, and 5 respectively. There were 8 deaths from influenza and 5 deaths from whooping-cough. Diphtheria caused one death; in the 4 weeks preceding deaths from diphtheria were one, 3, one, and 3 respectively. There was one death from enteric fever, and 4 deaths were registered as being due to diarrhoeal diseases. There was no death from either small-pox or typhus fever.

The deaths from tuberculous disease (36) comprise 2 deaths from tuberculous phthisis, 23 deaths from *phthisis*, 3 deaths from

tuberculous meningitis, 2 deaths from tuberculous peritonitis, one death from *tabes mesenterica*, and 5<sup>2</sup> deaths from other forms of the disease.

Two deaths were attributed to carcinoma and 6 deaths to *malignant disease* ("cancer").

Of 21 deaths assigned to diseases of the nervous system, 8 (all children under one year of age) were from *convulsions*.

There were 28 deaths from diseases of the heart and blood-vessels.

Diseases of the respiratory system caused 33 deaths, equal to an annual rate of 4.5 per 1,000 of the population, the average rate for the corresponding period of the past 10 years being 8.9 per 1,000. Included in the above total were 25 deaths from bronchitis, one death from broncho-pneumonia, and 4 deaths from *pneumonia*.

Seven deaths from accidental violence were registered.

In 12 instances the cause of death was "uncertified," there having been no medical attendant during the last illness. These cases comprise the deaths of 10 children under one year of age and the death of one person aged 64 years.

Fifty-six of the persons whose deaths were registered during the week were under 5 years of age (31 being infants under one year, of whom 7 were under one month old), and 48 were aged 60 years and upwards, including 21 persons aged 70 and upwards, of whom 2 were octogenarians, and one (a female) was stated to have been aged 93 years.

The Registrar-General points out that the names of causes of death printed above in italics should be avoided whenever possible in Medical Certificates of the Cause of Death.

#### STATE OF INFECTIOUS DISEASE IN THE DUBLIN REGISTRATION AREA AND IN BELFAST.

Returns of the number of cases of infectious diseases notified under the "Infectious Diseases (Notification) Act, 1889," as set forth in the following table, have been furnished by Sir Charles A. Cameron, C.B., Medical Superintendent Officer of Health for the City of Dublin; Mr. Fawcett, Executive Sanitary Officer for Rathmines and Rathgar Urban District; Mr. Manly, Executive Sanitary Officer for Pembroke Urban District; Mr. Heron, Executive Sanitary Officer for Blackrock Urban District; Dr. Byrne Power, Medical Superintendent Officer of Health for Kingstown Urban District; and by Dr. Whitaker, Medical Superintendent Officer of Health for the City of Belfast.—

TABLE SHOWING THE NUMBER OF CASES OF INFECTIOUS DISEASES notified in the Dublin Registration Area (viz.—the City of Dublin and the Urban Districts of Rathmines and Rathgar, Pembroke, Blackrock, and Kingstown), and in the City of Belfast, during the week ended February 28, 1903, and during each of the preceding three weeks.

| CITIES AND URBAN DISTRICTS           | Week ending | Small-pox | Measles | German Measles (Rubella) | Scarlet Fever | Typhus Fever | Relapsing Fever | Diphtheria | Membranous Croup | Continued Fever | Typhoid or Enteric Fever | Erysipelas | Puerperal Fever | Varicella | Other Notifiable Diseases | Total |
|--------------------------------------|-------------|-----------|---------|--------------------------|---------------|--------------|-----------------|------------|------------------|-----------------|--------------------------|------------|-----------------|-----------|---------------------------|-------|
| City of Dublin                       | Feb. 7      | 2         | 31      | 4                        | 32            | -            | -               | 14         | -                | 4               | 16                       | 11         | -               | -         | 1                         | 109   |
|                                      | Feb. 14     | 1         | 27      | 2                        | 48            | -            | -               | 15         | -                | 1               | 29                       | 8          | -               | -         | 1                         | 137   |
|                                      | Feb. 21     | 2         | 27      | -                        | 38            | -            | -               | 12         | -                | 4               | 25                       | 13         | -               | -         | -                         | 121   |
|                                      | Feb. 28     | -         | 25      | -                        | 20            | 1            | -               | 10         | -                | 3               | 12                       | 11         | -               | -         | -                         | 80    |
| Rathmines and Rathgar Urban District | Feb. 7      | -         | 1       | -                        | 4             | -            | -               | 1          | -                | 1               | -                        | 1          | -               | -         | -                         | 8     |
|                                      | Feb. 14     | -         | 2       | -                        | 3             | -            | -               | -          | -                | -               | -                        | -          | -               | -         | -                         | 5     |
|                                      | Feb. 21     | -         | 2       | -                        | 8             | -            | -               | 3          | -                | -               | -                        | -          | -               | -         | -                         | 19    |
|                                      | Feb. 28     | -         | 5       | -                        | 4             | -            | -               | 1          | -                | -               | -                        | -          | -               | -         | -                         | 10    |
| Pembroke Urban District              | Feb. 7      | -         | -       | -                        | 7             | -            | -               | 1          | -                | -               | 1                        | 2          | -               | -         | -                         | 11    |
|                                      | Feb. 14     | -         | -       | -                        | 3             | -            | -               | 1          | -                | -               | 1                        | 5          | -               | -         | -                         | 10    |
|                                      | Feb. 21     | -         | -       | -                        | 4             | -            | -               | -          | -                | -               | 1                        | 1          | -               | 1         | -                         | 7     |
|                                      | Feb. 28     | -         | 2       | -                        | 1             | -            | -               | 1          | -                | -               | -                        | 1          | -               | -         | -                         | 5     |
| Blackrock Urban District             | Feb. 7      | -         | -       | -                        | -             | -            | -               | -          | -                | -               | -                        | -          | -               | -         | -                         | -     |
|                                      | Feb. 14     | -         | -       | -                        | -             | -            | -               | -          | -                | -               | 1                        | -          | -               | -         | -                         | 1     |
|                                      | Feb. 21     | -         | -       | -                        | -             | -            | -               | -          | -                | -               | -                        | -          | -               | -         | -                         | -     |
|                                      | Feb. 28     | -         | -       | -                        | 1             | 1            | -               | -          | -                | -               | -                        | -          | -               | -         | -                         | 2     |
| Kingstown Urban District             | Feb. 7      | -         | -       | -                        | -             | -            | -               | -          | -                | -               | -                        | 1          | -               | -         | -                         | 1     |
|                                      | Feb. 14     | -         | -       | -                        | 2             | -            | -               | -          | -                | -               | 1                        | 2          | -               | -         | -                         | 5     |
|                                      | Feb. 21     | -         | -       | -                        | -             | -            | -               | -          | -                | -               | 1                        | 1          | -               | -         | -                         | 2     |
|                                      | Feb. 28     | -         | -       | -                        | -             | -            | -               | -          | -                | -               | -                        | -          | -               | -         | -                         | -     |
| City of Belfast                      | Feb. 7      | -         | -       | -                        | 12            | -            | -               | 3          | -                | 6               | 9                        | 14         | -               | -         | -                         | 44    |
|                                      | Feb. 14     | -         | -       | -                        | 7             | -            | -               | 3          | -                | 5               | 7                        | 10         | -               | -         | -                         | 32    |
|                                      | Feb. 21     | -         | -       | -                        | 6             | -            | -               | 8          | 2                | 7               | 11                       | 11         | 1               | -         | -                         | 46    |
|                                      | Feb. 28     | -         | -       | -                        | 7             | -            | -               | 15         | 4                | 5               | 8                        | 7          | -               | -         | -                         | 46    |

#### CASES OF INFECTIOUS DISEASES UNDER TREATMENT IN DUBLIN HOSPITALS.

During the week ending Saturday, February 28, 1903, two cases of small-pox were discharged from hospital, and 9 cases remained under treatment at its close.

Nine cases of measles were admitted to hospital, being 2 over the admissions in the preceding week; 5 were discharged, and 29 cases remained under treatment at the close of the week.

Ten cases of enteric fever were admitted to hospital, 6 cases were discharged, and 62 cases remained under treatment at the close of the week.

Thirty-two cases of scarlatina were admitted to hospital, 37 cases were discharged, there were 1 deaths, and 161 cases remained under treatment at the close of the week. This number is ex-

clusive of 23 patients who were under treatment in the Convalescent Home of Cork-street Hospital at Beneavin, Glasnevin.

Four cases of typhus fever were discharged, and 10 remained under treatment at the close of the week.

Eight cases of diphtheria were admitted to hospital, 7 were discharged, and 35 cases remained under treatment at the close of the week.

In addition to the above-named diseases, 7 cases of pneumonia were admitted to hospital, 4 patients were discharged, and 19 cases remained under treatment at the end of the week.

### ENGLAND AND SCOTLAND.

The mortality in the week ended Saturday, February 28, in 76 large English towns, including London (in which the rate was 16·3), was equal to an average annual death-rate of 16·6 per 1,000 persons living. The average rate for 8 principal towns of Scotland was 17·7 per 1,000, the rate for Glasgow being 18·8, and for Edinburgh 17·0.

### METEOROLOGY.

*Abstract of Observations made in the City of Dublin, Lat. 53° 20' N., Long. 6° 15' W., for the Month of February, 1903.*

|                                                 |   |   |   |                |
|-------------------------------------------------|---|---|---|----------------|
| Mean Height of Barometer,                       | - | - | - | 29·951 inches. |
| Maximal Height of Barometer (13th, at 9 a.m.),  |   |   |   | 30·527 „       |
| Minimal Height of Barometer (27th, at 3 a.m.),  |   |   |   | 28·550 „       |
| Mean Dry-bulb Temperature,                      | - | - | - | 46·2°.         |
| Mean Wet-bulb Temperature,                      | - | - | - | 43·6°.         |
| Mean Dew-point Temperature,                     | - | - | - | 40·7°.         |
| Mean Elastic Force (Tension) of Aqueous Vapour, |   |   |   | ·258 inch.     |
| Mean Humidity,                                  | - | - | - | 81·6 per cent. |
| Highest Temperature in Shade (on 8th),          |   |   | - | 59·0°.         |
| Lowest Temperature in Shade (on 28th),          |   |   | - | 31·7°.         |
| Lowest Temperature on Grass (Radiation) (28th)  |   |   |   | 27·8°.         |
| Mean Amount of Cloud,                           | - | - | - | 64·0 per cent. |
| Rainfall (on 15 days),                          | - | - | - | 2·234 inches.  |
| Greatest Daily Rainfall (on 26th),              |   |   | - | ·644 inch.     |
| General Directions of Wind,                     | - | - | - | S.W., W.       |

### Remarks.

Unlike its predecessors in 1900, 1901 and 1902, February, 1903, was singularly warm, the mean temperature being 5·0°

above the average— $47.5^{\circ}$ , as against  $42.5^{\circ}$ . It was  $8.2^{\circ}$  warmer than February, 1902, and in fact proved a record month in Dublin for warmth. Also, the weather was dry until the 19th—only .203 inch of rain being registered up to that day. But thenceforward rain fell almost daily to the close of the month, and often heavily, .644 inch being recorded in a disastrous cyclone on the night of the 26th–27th. Rough S.W. winds prevailed all through the month, and gales were recorded on as many as 10 days—a persistent area of high atmospheric pressure over France and the Peninsula causing gradients to become very steep in the British Isles in connection with depressions which travelled north-eastwards in rapid succession over the Atlantic, Norwegian Sea and Scandinavia.

But the epoch-making incident of the month was a hurricane on the night of the 26th–27th. The morning of the 26th was clear and cold. At 9 a.m. the barometer stood at 29.497 inches, and was rising in the rear of a deep depression which had passed across the N.W. of Ireland during the previous night. As the day advanced a sheet of cirriform cloud spread across the sky from S.W. and the barometer fell rapidly, the wind backing from W.S.W. to S.S.E. Rain began to fall in heavy showers after 6 p.m. About 8.30 p.m. a fresh gale set in from S. This increased to a whole gale (force 10) or storm (force 11) by 11 p.m. Terrific wind gusts followed, and early on the morning of the 27th a hurricane was raging.

Mr. R. H. Curtis, F.R. Met. Soc., of the Meteorological Office, London, reports as follows on the wind velocity at Kingstown during the gale of February 26–27, 1903, as registered by the Robinson cup-anemometer on the East Pier of the Harbour:—“The average hourly velocity during the twelve hours from 8.30 p.m., 26th, to 8.30 a.m., 27th, was  $67\frac{1}{2}$  miles per hour (= 50 miles per hour); between 2.50 a.m. and 5.10 a.m., 27th, the average velocity was 87 miles per hour (= 64 miles per hour); between 3.30 a.m. and 4.30 a.m. the velocity was 90 miles (= 66 miles). The highest velocity I can find is 48 miles in the half hour from 4 to 4.30 a.m., equal to a rate of 96 miles per hour (= 70 miles per hour). These are *mean* velocities for the periods named, and do not indicate the force during gusts, which the cup-anemometer at Kingstown is not constructed to record. The first values are “nominal velocities” based on the assumption that the wind travels three times as fast as the cups (“factor 3”). This factor is too high—it should be 2.2—and the actual velocities

are most probably those given in brackets by the side of the others."

By 3 a.m. the barometer had fallen to 28·550 inches. Forest trees went down in hundreds, and havoc was wrought among buildings, roofs, and chimneys. It is estimated that in the Phoenix Park alone the storm uprooted 1,000 large trees, chiefly elms. Lightning flashed at short intervals all through the night, but thunder was not heard, probably owing to the roar of the tempest. No such furious storm had been felt in Dublin since the memorable "big wind" of January 6, 1839.

The duration of bright sunshine was estimated at 63·5 hours, or a daily average of 2·3 hours, compared with 79·25 hours, or a daily average of 2·8 hours in February, 1902.

In Dublin the mean temperature (47·5°) was 5·0° above the average (42·5°), thus establishing a record for warmth. The mean dry-bulb readings at 9 a.m. and 9 p.m. were 46·2°. In the thirty-eight years ending with 1902, February was coldest in 1895 (M. T. = 34·2°), and warmest in 1869 (M. T. = 46·7°). In 1900 the M. T. was 37·9°; in 1901 it was 39·2°; and in 1902, 39·3°.

The mean height of the barometer was 29·951 inches, or 0·096 inch above the average value for February—namely, 29·855 inches. The mercury was as high as 30·527 inches at 9 a.m. of the 13th, and fell to 28·550 inches about 3 a.m. of the 27th. The observed range of atmospheric pressure was, therefore, 1·977 inches.

The mean temperature deduced from daily readings of the dry-bulb thermometer at 9 a.m. and 9 p.m. was 46·2°, or 4·8° above the value for January, 1903. Using the formula, *Mean Temp.* = *Min.* + (*Max.* — *Min.* × ·50), the M. T. is 47·5°, compared with a thirty (1871–1900) years' average of 42·5°. On the 8th the thermometer in the screen rose to 59·0°—wind, W.S.W.; on the 28th the temperature fell to 31·7°—wind, calm. The minimum on the grass was 27·8°, also on the 28th.

The rainfall was 2·234 inches, distributed over 15 days. The average rainfall for February in the thirty-five years, 1866–1900, inclusive, was 1·990 inches, and the average number of rainy days was 16. The rainfall, therefore, was above, whereas the rainy days were below, the average. In 1883 the rainfall in February was large—3·752 inches on 17 days; in 1879 also 3·706 inches fell on 23 days. On the other hand, in 1891, only ·042 inch was measured on but 2 days.

The atmosphere was foggy on the 12th only. The amount of



cloud—64·0 per cent.—was below the average—66 per cent. High winds were noted on 16 days, and reached the force of a gale on 10 days, namely—the 6th, 7th, 19th, 20th, 21st, 22nd, 24th, 25th, 26th, and 27th. On the last named days a hurricane prevailed. Hail fell on the 23rd. Snow or sleet fell on the 1st and 23rd. A lunar halo was seen on the 6th. There was a brief thunderstorm with snow and hail on the 23rd, and lightning was seen on the 25th, 26th, and 27th.

The temperature reached or exceeded 50° in the screen on 20 days, and it fell below 32° on only one night, compared with as many as 18 nights in 1895, only one night in 1896, 7 nights in 1898, 4 nights in 1899, 12 nights in 1900, 9 nights in 1901, and 10 nights in 1902. The minima on the grass were 32° or less on 3 nights, compared with every night in 1895, 21 nights in 1900, 17 in 1901, and 11 in 1902. The thermometer never failed to rise to 40° in the screen, and it did not fall below 50° between the 7th and the 12th.

In Dublin the rainfall up to February 28th, 1903, amounted to 5·503 inches on 35 days, compared with 3·872 inches on 29 days in 1901, 5·735 inches on 50 days in 1900, 4·651 inches on 39 days in 1899, only ·714 inch on 16 days in 1891, 3·362 inches on 22 days in 1902, and a thirty-five years' (1866–1900) average of 4·220 inches on 34 days.

---

The rainfall at Cloneevin, Killiney, Co. Dublin, amounted to 2·08 inches on 14 days, compared with 2·35 inches on 12 days in February, 1902. Only ·13 inch fell during the first 20 days of the month. The average rainfall for February during 18 years, 1885–1902, at this station is 1·787 inches on 13·7 days. The greatest rainfall in 24 hours was ·77 inch on the 26th. Since January 1 the rainfall was 4·90 inches on 35 days, compared with 3·97 inches on 24 days in 1902, 4·39 inches on 28 days in 1901, 7·23 inches on 48 days in 1900, 6·28 inches on 36 days in 1899, 3·32 inches on 29 days in 1898, 4·31 inches on 38 days in 1897, and 1·64 inches on 19 days in 1896.

Dr. Arthur S. Goff reports that at Lynton, Dundrum, Co. Dublin, rain fell on 15 days to the amount of 2·95 inches, the greatest daily fall being ·78 inch on the 26th. In February, 1901, the rainfall was 1·55 inches on 10 days; in 1902 it was 2·76 inches on 11 days. The temperature in the shade ranged from 33° on the 2nd to 58° on the 8th. The mean temperature in the screen was 47·1° compared with 39·0° in 1902.

At Knockdolian, Greystones, Co. Wicklow, 2·870 inches of rain fell on 14 days. The heaviest fall in 24 hours was ·750 inch on the 26th. In February, 1900, the fall was 6·670 inches on 20 days; in 1901, 1·385 inches on 11 days; in 1902, 2·590 inches on 8 days. The total fall to February 28th, 1903, inclusive, was 6·170 inches on 29 days, compared with 4·450 inches on 17 days in 1902, 5·420 inches on 27 days in 1901, 10·436 inches on 44 days in 1900, 8·610 inches on 42 days in 1899, 3·980 inches on 29 days in 1898, 5·190 inches on 37 days in 1897, and only 1·940 inches on but 17 days in 1896.

From Dr. B. H. Steede we learn that the rainfall at the National Hospital for Consumption, Newcastle, Co. Wicklow, was 3·096 inches on 16 days, compared with 5·929 inches on 20 days in February, 1900, 1·296 inches on 11 days in 1901, and 2·923 inches on 10 days in 1902. The maximal fall in 24 hours was ·690 inch on the 26th, but ·620 inch also fell on the 25th. Up to February 28th, the rainfall at Newcastle amounted to 7·416 inches on 35 days, compared with 4·589 inches on 22 days in 1902, and 4·837 inches on 25 days in the corresponding period of 1901. At this Second Order Station the screened thermometers fell to 33·0° on the 1st and 23rd, and rose to 57·6° on the 8th.

At the Railway Hotel, Recess, Connemara, Co. Galway, the rainfall was 5·890 inches on 22 days, compared with 3·196 inches on 12 days in February, 1902, only 1·748 inches on 11 days in 1901, and 3·786 inches on 17 days in 1900. The maximal fall in 24 hours was ·75 inch on the 26th, and again on the 28th. Hail showers fell on the 22nd, 23rd, and 24th; snow and rain on the 25th.

Dr. J. Byrne Power, F.R. Met. Soc., Medical Superintendent Officer of Health, Kingstown, reports that the mean temperature at that health resort was 47·2°, being 5·1° above the average, and the highest mean for February on a record of 13 previous years (1873–80 and 1898–1902), the next highest was 46·1 for February, 1880. The extremes were—highest, 58·5° on the 8th; lowest, 31·5° on the 28th. The mean temperature at Portland Bill was 45·5°, and at Dungeness 43·8°. The mean of these two (44·7°) may be taken as the average mean temperature of the principal health resorts on the south coast of England, between Portland and Dungeness, being situate from west to east, Weymouth, Bournemouth, Ventnor I. W., Brighton, Eastbourne, St. Leonard's, &c. The extremes on the south coast of England were—highest, at Dungeness, 54°: lowest,

also at Dungeness, 28°. The mean daily range of temperature was 9·2° at Kingstown, 9·6° at Dungeness, and 6·1° at Portland. The mean temperature of the sea at Sandycove bathing-place was 45·8°—maximum 47°, minimum 44°. The total rainfall was 1·70 inches at Kingstown on 14 days, 1·72 inches at Portland on 16 days, and 0·77 inch at Dungeness. The duration of bright sunshine was 56·9 hours at Kingstown, 59·3 hours at the Ordnance Survey Office, Phoenix Park, 34·7 at Valentia, 38·0 at Parsonstown, 58·4 hours at Southport, and 66·2 hours at Eastbourne. There was a remarkable absence of easterly wind at Kingstown during the month, as on one day only it was in that quarter (S.S.E.): at Portland it was easterly on 4 days, and at Dungeness on 3 days.

---

#### THE BLOOD IN LATE SYPHILIS.

G. LÖWENBACH and M. Oppenheim (*Deutsches Archiv. für klin. Medicin.*, Leipzig) have ascertained that both hæmoglobin and the proportion of iron are materially diminished in the ulcerative and gummatous forms of syphilis. The findings of both ferrometer and hæmatometer agree. The red blood corpuscles range within normal limits.

#### BEDSORES.

PALMER, in *Merck's Archives*, recommends a method in the treatment of bedsores due to pressure and atrophic changes aggravated by urine undergoing ammoniacal decomposition. A bag of soft linen is made sufficiently large to extend down the thighs and along the patient's spine. This bag is then filled with bran previously moistened with dilute sulphuric acid. Sufficient bran is used to make an easy cushion. By this method the urine which is constantly dribbling from the patient is absorbed by the bran, and the sulphuric acid present neutralises the ammonia. The proportions advised are about two ounces of sulphuric acid to a quart of bran. This should be renewed every second day. It makes the bran only slightly moist.—*The Journal of the American Medical Association*, March 14, 1903.

CORTICAL HEMIOPHIA AND SECTOR DEFECTS OF THE VISUAL FIELD. SEVERAL cases of hemianopsia are reported and discussed by Dr. Edward Jackson. Two of them seemed to support the view of Hun, Wilbrand, and Henschen, that the upper lip of the calcarine fissure is connected with the upper part of the retina, having to do with the lower quadrants of the field.—*Medical News*, New York, February 28, 1903.

## PERISCOPE.

### OPEN-AIR TREATMENT FOR THE POOR.

THE time has now arrived for the provision of facilities for the Open-Air Treatment of Consumption amongst the poor to be regarded as a positive necessity. In Germany there are hundreds of Sanatoria maintained by Insurance Societies, who find it pays them to cure their subscribers, rather than pay the claims which they would have to meet were the disease allowed to run its course. In England there are a few municipal and gratuitous Sanatoria and a few others where the treatment is provided at a nominal fee, but so many are the applicants and so few are the vacancies that patients must wait months for admission, and even then in most cases the stay is so limited as to time that complete cures are possible only in the mildest cases, and many patients who return to their former unhealthy surroundings and dangerous occupations run great risks of relapse. No one is more alive to the needs of the poor than His Majesty the King, who is devoting £200,000 to the erection and maintenance of an Open-Air Sanatorium for the poor, but one such Sanatorium, though a great boon and magnificent example, will not do much towards meeting the demands of our necessitous consumptives. Sanatoria as such are not sufficient in themselves; they should be combined with working colonies, where poor patients could be put in the way of fitting themselves for a useful out-door life after the cure has been effected. An Industrial Sanatorium Farm Colony has just been opened at Ipsden, near Wallingford, by Drs. Charles Reinhardt and Frank Fowler (who conduct the Hailey Sanatorium, near Wallingford, and the Stourfield Park Sanatorium, Bournemouth, for wealthier patients). At the Subscription Sanatorium patients are received at a small charge, and are expected to work at such employment as the Resident Physician may find them physically and otherwise fit for; and amongst other avocations they have the opportunity of learning pheasant-farming, poultry-rearing, gardening, and various agricultural operations, in order to gain experience in such outdoor occupations as may be useful to them after they leave the Sanatorium.

# NESTLE'S FOOD

An Entire Diet for Infants,  
Children, and Invalids.

The  
attention of the  
Medical Profession is  
also drawn to

"Renders valuable assistance in Wasting Fever."  
"Beneficial as a diet in severe cases of Typhoid."  
"Invaluable in Cholera Infantum."

Pamphlet containing Extracts from  
Standard Medical Works in which  
the above Testimony is given  
sent free, with Sample Tin,  
on application to  
H. NESTLE,  
28 Cannon-st.,  
London,  
E.C.

# NESTLE'S SWISS (CONDENSED) MILK

Which, through its RICHNESS in CREAM and UNIFORMITY of  
QUALITY, has obtained the Largest Sale in Great Britain.

It can be used for all purposes of FRESH MILK.

*Samples to Members of the Medical Profession only sent free on application to H. NESTLE, 28 Cannon-street, London, E.C.*

**AK** "AK" **ANTI-KAMNIA**  
**& HEROIN**  
**TABLETS**  
**FOR**  
**KEEING COUGHS**  
**THROAT, BRONCHI,**  
**LUNG AFFECTIONS**

**Strongly Recommended.**

**ANTI-KAMNIA & HEROIN tablets**

(5 gr. Antikamnia, 1-12 gr. Heroin Hydrochlor.),

**a Respiratory Stimulant, Sedative, Expectorant and Analgesic.**

**Heroin Hydrochloride** is indicated in Coughs of all kinds, whatsoever the cause, in Dyspnoea, and in all Catarrhal Inflammations of the Respiratory Mucous Membrane, and in all cases in which morphine is contra-indicated; while **Antikamnia** furnishes the Analgesic, Antipyretic, and Anodyne effect which is so soothing and comforting to patients.



**ANTI-KAMNIA, 5-gr. tablets**



**ANTI-KAMNIA & HEROIN**

In 1-oz. packages, 3/10 per oz., post free, price for dispensing purposes.

**Of all leading Drug Houses and**

**THE ANTI-KAMNIA CHEMICAL COMPANY,**

**46 HOLBORN VIADUCT, LONDON.**

**"We can confidently recommend it."**—Brit. Med. Jnl.

# LACTOPEPTINE

## FORMULA :

|                                  |     |                |
|----------------------------------|-----|----------------|
| <b>Sugar of Milk</b>             | ... | ... 40 ounces. |
| <b>Pepsin (Pure)</b>             | ... | ... 8 "        |
| <b>Pancreatine (Pure)</b>        | ... | ... 6 "        |
| <b>Veg. Ptyalin or Diastase,</b> | ... | ... 4 drachms. |
| <b>Lactic Acid</b>               | ... | ... 5 fl. ,    |
| <b>Hydrochloric Acid</b>         | ... | ... 5 fl. ,    |

**Note on Formula.**—The digestive strength and purity of each drug are tested with the utmost accuracy; and it would be impossible for any chemical establishment to produce a similar preparation without elaborate plant and years of experience. The digestive strength of Pepsin, as commercially known, varies from 500 to 4,000, and like quinine only has medicinal value when proved by analysis. Prof. Attfield says of LACTOPEPTINE that the pepsin is much superior to that ordinarily used in medicine, and that as regards the other ingredients they are the best that can be obtained.

## For Diseases of the Stomach.



Proved itself for 30 Years efficient in

Dyspepsia,  
Acute Indigestion,  
Marasmus,  
Impaired Nutrition,

General Debility, Loss of Appetite, Constipation,  
Morning Sickness, Infantile Diarrhoea, and other  
Diseases of the Digestive Function.

**Dose, 10-15 grs.**

**MARKETED IN POWDER AND TABLETS.**

In 1-oz., 4-oz., and 8-oz. bottles: prices for Dispensing purposes, 3/5, 10/9, 20 10 respectively, post free.

## CAUTION.

Specify **In full** "LACTOPEPTINE (**Richards**).**"** Abbreviations are found to lead to substitution and consequent disappointment.

**JOHN MORGAN RICHARDS, 46 Holborn Viaduct, E.C.**

# The Best & Tasteless Natural Aperient

# ÆSCULAP

"Possesses all the good properties claimed for other well-known aperient waters."—

Professor KARL von KETLI.

"Invaluable in all cases where a safe and efficient aperient is required."—

Professor FRIEDRICH von KOBANYI.

"I prescribe Æsculap in preference to all the other saline waters."—

Professor ERNST SCHWIMMER.

"A reliable, safe, and efficacious aperient."—Professor AYTEL von BAUMIS.

"Free from any foreign additions."—Professor LIEBERMANN.

"Free from any organic impurity."—Professor TICHBORNE.

"The clearest and purest of all the Hungarian aperient waters."—*The Hospital.*

THE BOTTLING AND MANAGEMENT OF THE ÆSCULAP SPRINGS AT BUDAPEST  
ARE CARRIED ON DIRECTLY UNDER ENGLISH SUPERVISION.

The ÆSCULAP BITTER WATER CO., Ltd.,  
LONDON, E.C., and BUDAPEST.

# GOUT

## Wiesbaden Gout-Water

TABLE AND MEDICINAL WATER.

**Disorders of the Change of  
Matter.**

Surprisingly quick results in Home Treatment, without disturbing profession, attested by first rank Medical Authorities, in cases of

**Uric Acid Calculi, Diabetes, Liver and  
Kidney Diseases, Hyperacidity.**

Highest proportion of Sodium Carbonate and Lithium. Lowest percentage of Lime.

**Samples Free** to members of the Medical Profession on application.

Forwarded in cases of 1-3 dozen. List of dealers in all large towns by the LONDON AGENCY—

**L. R. VOIGT & CO., 25 Great Tower Street, E.C.**

**SOLD BY ALL CHEMISTS.**

To be obtained in Dublin from—

Messrs. HAMILTON, LONG & CO., 3 Lower Sackville Street.



# BENGER'S FOOD

For INFANTS, INVALIDS, and THE AGED.

---

This delicious, highly nutritive, and most easily digested Food is specially prepared for Infants, and for those whose digestive powers have been weakened by illness or age.

---

*The following letter is published by special permission of the Russian Court.*

“ Balmoral Castle,

“ Scotland, 25th Sept.

“ Sirs,—Please forward to Balmoral Castle one dozen 2/6 Tins of BENER'S FOOD for H.I.M. THE EMPRESS OF RUSSIA, addressed to Miss Coster. We have received the box ordered from Peterhoff.

“ Yours truly, F. COSTER.

---

*The Lancet* describes it as “ Mr. Benger's admirable preparation.”

*The London Medical Record* says :—“ It is retained when all other foods are rejected. It is invaluable.”

*The British Medical Journal* says :—“ Benger's food has by its excellence established a reputation of its own.”

*The Illustrated Medical News* says :—“ Infants do remarkably well on it. There is certainly a great future before it.”

A *Government Medical Officer* writes :—“ I began using your Food when my son was only a fortnight old, and now (five months) he is as fine a boy as you could wish to see.”

From an *eminent Surgeon* :—“ After a lengthened experience of Foods, both at home and in India, I consider Benger's Food incomparably superior to any I have ever prescribed.”

A *Lady* writes :—“ Really I consider that, humanly speaking, Benger's Food entirely saved baby's life. I had tried four other well-known Foods, but he could digest nothing until we began the ‘ Benger.’ He is now rosy and fattening rapidly.”

---

BENER'S FOOD is sold in Tins by Chemists, &c., Everywhere.

---

WHOLESALE OF ALL WHOLESALE HOUSES AND SHIPPERS.

# Valentine's Meat-Juice

For quieting the **Irritable Stomach** during **Pregnancy**, for sustaining and nourishing in **Long and Exhausting Labor**, for rapidity in making new and highly vitalized Blood, after Hemorrhage, when other forms of food fail, **Valentine's Meat-Juice** is regularly employed in hospital and private practice and recommended by well-known members of the medical profession.

**C. C. Frederick, M. D.,**  
*Clinical Professor of Gynecology,*  
*University of Buffalo, New York,*  
*U. S. A.:* "I have used Valentine's Meat-Juice in the Irritable Stomachs of Pregnant Women and after Abdominal Operations, with excellent success."

**Prof. Dr. A. Jentzer,** *Professor of Gynecology, Director of Obstetrical and Gynecological Clinic in the University of Geneva, Switzerland:* "I have used Valentine's Meat-Juice in the treatment of Women weakened by Puerperal Hemorrhages. The preparation was well retained, well assimilated, and the patients regained their strength very rapidly."



Physicians are invited to send for brochures containing clinical reports.

For Sale by European and American Chemists and Druggists.

**VALENTINE'S MEAT-JUICE COMPANY.**

Richmond, Va., U. S. A.